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## EXCAVATIONS IN MELOS, 1898.

(PLATES I., II., III.)

### I.

#### THE SEASON'S WORK.

BY D. G. HOGARTH.

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THE initial stages of the excavation of the prehistoric city near the hamlet of Phylákopi in north-west Melos have been reported in previous issues of the *Annual* (II. and III.). The development of this exploration in its second season (1897) made it imperative that its continuation should be the principal, indeed the sole, objective of the next campaign of the School; and to that end accordingly our funds and energies were exclusively directed in the spring of 1898.

After Mr. Cecil Smith's description (*Ann.* III. pp. 6 ff.), it is unnecessary for the present to say anything more about the surroundings of Phylákopi. The results of his second campaign demonstrated that we had to do with a site of an importance little suspected previously,—with a site, in fact, which has no equal as yet known in the Greek islands, and rivals the great prehistoric towns on the mainland. The Phylákopi ruins represent the earliest capital of the island of Melos, which once commanded a shallow, sheltered port of considerable size, now become dry land, and was of great natural and artificial strength, being united to the mainland by a narrow neck, across which was carried, at the epoch of the city's greatest prosperity, an immensely massive fortification. It appears that a main source of its early wealth (and perhaps the determining cause of its original foundation) was the manufacture and export of implements of obsidian, a volcanic product of which in its more highly vitrified state

Melos has, so far as we know at present, the monopoly within the Levantine area. In the other parts of the eruptive belt which stretches from the peninsula of Methana in a half-moon through Melos, Kimolos and Santorin to Nisyros, this material in a high state of vitrification has not been observed. There is no evidence and little likelihood that it exists in Crete, and in fact its nearest occurrences are reported to be in Mount Alageuz in Russian Armenia,<sup>1</sup> and in the prolongation of the volcanic system of Sinai along the north-western coast of the Red Sea. Melos must therefore have exported through Phylákopi to all the surrounding islands and coasts from the earliest times throughout the bronze age, until the age of iron was fairly established. For bronze alone does not appear to succeed in ousting stone from domestic use. Obsidian arrow-heads, for example, appear among the bronze finds of the Circle graves at Mycenae; and for rough cutting purposes it has been observed (*e.g.* in Egypt) that cheap stone implements have often long co-existed even with iron.

The existence of this important commerce at Phylákopi rendered it probable *a priori* that the site would show traces of foreign products and influences among the local remains; and such, as will be seen later, has proved actually to be the case. The other Cyclad islands, Crete, and the Greek mainland, have all contributed at the same epoch or at different epochs; and this fact adds greatly to the importance of the exploration of Phylákopi. There is probably no spot more favourably circumstanced for the study not only of the part played by the islands in the evolution of Aegean prehistoric civilization, but of the force and direction of the influences that worked upon it from without.

For our present purpose of presenting an interim Report of the progress of this exploration in the season of 1898, we must take up the narration where we took up the work, namely, at the point where it was left in the season preceding. As an excavation progresses, it goes without saying that much modification is bound to be introduced into views and interpretations. In the sequel we shall refer to certain points, in which other eyes, or the widened experience of 1898, have served to correct statements made in the Report of 1897; but in no other respect shall we go over the ground of that Report again, until the time comes for full and final publication of the whole body of results.

<sup>1</sup> v. J. de Morgan, *Mission au Caucase*, I. p. 31. The Levantine obsidian is there wrongly ascribed to Crete.

The contract entered into by Mr. Cecil Smith with the proprietor of the western portion of the site still held good for the season of 1898, and guaranteed us a considerable area not completely or not at all excavated. But with the widow who owned the eastern and lower part of the site, and had refused all offers in 1897 (cp. *Ann.* III. p. 11), we had come to no satisfactory arrangement, when already it was time to think of resuming the excavation. Having failed by all independent means, after months of negotiation, to obtain from her such a contract as the Ephorate required, I appealed finally to the Ephor-General himself with fortunate results. Through his good offices with M. Tatarákis, late Deputy for Melos, an agreement was at last made with the widow, in virtue of which she resigned the digging rights on the uncultivated part of her Phylákopi property to the State, and furthermore gave to the latter a right of subsequent pre-emption of the fee-simple. A question was raised later as to what part of the property was to be considered uncultivated—a mere lawyer's quibble, for no part of the Phylákopi hillock has been ploughed within the memory of man. The contract was signed at last on April 12th.

We had already organized matters for opening the work, and, in fact, began to dig the day before the contract was signed. Mr. Mackenzie had brought from Athens such tools, wheelbarrows, etc., as we possessed. We employed one overseer only, Philippas Oekónómou, the most intelligent of the workmen of the preceding year, but more as a handy and trusted supernumerary, indeed, than as an overseer. The Government was represented by M. Kourouniótes, who resided in Pláka. Unfortunately he suffered from ill health all the season, and one of the Museum watchmen, M. Grímínes, had to be sent out to assist him. There was also a native Melian employed as Government *epistátes*. All co-operated cordially with us, and rendered valuable assistance in watching the men and seeing to the transport of the finds to Athens at the close of the dig. The workmen were all native Melians, a singularly honest and industrious lot as compared with many that I have had to do with in excavation work, but possessing little experience and not conspicuous intelligence. Consequently, while they were little likely to steal, they needed constant watching and directing; and I found it not advisable to introduce among them methods that, following Mr. Petrie, I had used from time to time in Egypt, under which the men are left very much to themselves. For instance, payment by cubic metre of earth excavated, which I had contemplated introducing in

order not to have to "drive" the gangs, proved not feasible in view of the large quantity of valuable pottery which the soil everywhere contained. It would have been necessary to counteract the tendency to haste, which all metre work induces, by paying a price for countless sherds which up to then had had no money value in the island. Both the disbursement would have been too great for our funds, and an unfortunate precedent would have been introduced to disturb the Arcadian simplicity of the Melians. So we proceeded by the simple method of personal supervision, in which Mr. Mackenzie did yeoman service. The men were soon taught to respect all potsherds and constructions, and to note and keep a record of the levels at which they found them. Less easy was it to keep their eyes open to rarer objects, occurring occasionally and unexpectedly, such as stone implements or bronze. The extreme hardness of the earth, caked by sea spray to a depth sometimes of a metre below the surface, and the frequent presence of large stones, rendered the use of the large pick—that most undesirable tool—always unavoidable, but the smallness of the rooms, which we dug to depths of from four to six metres, rendered long-handled spades useless. I supplemented the baskets by half-a-dozen barrows, partly hired in the island, and ultimately employed a large number of boys as carriers, a plan which proved a great saving in expense, but was apparently a novelty in Melos. A flying steel rope basket line, however, would supply the best method of "dumping" on this site, as on so many others, where earth cannot simply be turned over and thrown back into the ground just excavated. Wages run high in Melos owing to the presence of mining works. The men had to be paid 3 drachmas, if a picked lot was to be secured and retained, and the boys from 2½ down to 1½ according to strength and size. In order to wash the potsherds and render it possible to sort them at once, we employed a small number of girls at boys' wages. They did more in the day than any but a very few men; but the punctilious proprieties of Melian life exact the complete separation of girls from male workpeople, and it will therefore never be possible to employ them except on odds and ends of work. With half-a-dozen exceptions the men came from the group of villages about the harbour, two hours away; and they were forced therefore to camp out in shelters and caves between Sundays, or the too frequent feast-days that vex the soul of European masters of labour in Greek lands. This, however, they gladly did. We had no difficulty in getting as many of them as we wanted, and threat of

dismissal was sufficient to stop any irregularity. They did the longest, if not the hardest <sup>1</sup> day's work I have ever known in excavation, latterly from 5 A.M. to 7 P.M., with 2½ hours interval.

When we opened the campaign on Monday, April 11th, the work before us was to explore in some sense all the hillock of Phylakopi, except the south-western horn, and about half of the great fortification. The diggers of the year before had advanced inwards from the Strong Wall and the west cliff at several points towards the main part of the site; but in the former case only by trenches which time had not allowed of their carrying down to rock, and in the latter by taking off just the surface layer and laying bare the well-preserved ground plan of a house or houses of the latest settlement. Where the diggers of 1897 had cleared the site completely, *i.e.* on the south-west horn, they had shown at different points walls of three successive settlements.

One or two architectural statements made in the Report of 1897 must be corrected ere we go farther. The evidence of three settlements, mentioned above as visible in structures on this south-western part of the site, may be obtained (1) from walls which run under the Strong Wall and existed before it. These belong to the *second* settlement, the first of which we have structural remains. (2) From the main mass of the Strong Wall, which is *from the foundation up* of the *third* settlement. No traces of an earlier period occur in it (*cf. Ann. III. p. 13*). The "ledge" of inferior construction which exists at one point under the main mass of this wall, is simply its contemporary foundation, never intended to be seen.<sup>2</sup> The pottery underlying this is of the second not the first period. The Strong Wall, therefore, has nothing to do with the primitive second settlement, but was built over and irrespective of it. The only other period of which it contains evidence is the *fourth* or "Mycenæan," during which it was added to and repaired. (3) From the surface rooms in Region III. (*Ann. III. p. 18*) which are the best surviving structures of the *fourth* period.

The so-called "chambers" within the thickness of the Strong Wall (*Ann. III. p. 14*) are probably not strictly chambers at all, but spaces

<sup>1</sup> For instance the result of their day was not nearly equal to that attained by an R.E. working party, that was once placed at my disposal in Alexandria. Nor were they equal to Mr. Petrie's picked *fellahin* from the Fayûm.

<sup>2</sup> Our own observation on this point was fully confirmed by Dr. Dörpfeld when he visited the site.

formerly filled in with rubble so as to be solid. This cheap and expeditious method of constructing a thick wall has been in vogue in all ages. It explains many walls on the Phylakopi site which are faced outwardly only. The lower or eastern part of the Strong Wall we found to be made up of similarly filled in "chambers." The statement on p. 17 of *Ann.* III. that "masses of *burnt brick*" were largely employed by the builders of the second settlement is misleading. There is, so far as I know, no genuine burnt brick on the site: the nearest thing to it is a baked composition occasionally used for flooring.

The small number also of sherds and other objects brought away in 1897 had raised problems rather than settled them. Especially the stratification of the pottery had been called in question by more than one archaeologist who had looked over the bags deposited at Athens; and it was evident that in 1898 we must pay closer attention to stratification, and preserve every scrap of ware, until it could be cleaned and examined.<sup>1</sup>

Looking over the large unexcavated area I had determined to transfer the work from the south-west, where the neighbourhood of the fortification rendered it unlikely that we should hit upon good house remains, to that region on the northern cliff, which represented evidently as much of the central high part of the town as the sea had spared. Here there existed ample signs on the surface that house remains of at least the latest settlement were present. But two preliminary tasks were imperative; first to establish, by trenches which would admit of a mechanical record, the stratification of the potsherds at different points of the site where disturbance was not likely to have taken place; and secondly, to determine, if possible, both the further direction of the great south fortification towards the east, and its possible return northwards to the sea—in other words to get the outer limits of the town. The first named object was attained by carrying trenches down by successive half metres to virgin rock in squares E 3 and J 1 (*v. plan*, Plate I.), where the floor level of the uppermost layer

<sup>1</sup> This confusion was not due to any carelessness or omission on the part of those responsible in 1896. The breaking away of the cliff up to within a very few feet of the Strong Wall on the north, as Mr. Mackenzie points out, had caused the accumulation of earth over and beside that structure to slide so steeply in the course of ages that at the cliff edge the latest potsherds occurred actually on the rock itself. A record, therefore, based on levels taken uniformly over the site would prove illusory for the region on which most of the work of 1897 was done. Furthermore, account must be taken of the fact that in laying the foundations of, and building so immense a structure as, the Strong Wall, unusual disturbance of the natural stratification of earlier remains must have taken place.

happened to be well preserved. The pottery from each successive half metre was kept apart and put in separate bags for future reference. In the first case the rock was found at 4 metres below the surface ( $= 3\frac{1}{2}$  metres below latest floor level); in the second at  $4\frac{1}{2}$  and  $6\frac{1}{2}$  metres, the rock surface being uneven: the late floor level at this point only averaged  $\cdot 25$  below the absolute surface.

The second object was never satisfactorily attained. The Strong Wall was indeed found to continue without a break eastwards, being contained in the steep *talus* which confronts the visitor approaching from the south. The wall, however, though constructed on the same system (cf. *Ann.* III. pp. 11 ff. and *supra*, p. 6) as is the case further west, is not of anything like the same massiveness, or architectural pretension: and, so far as we could discover, it fades away without any return northwards into the low cultivated ground, which fringes the hillock south and east, and is not included in our concession. A great number of trenches driven in all directions by Mr. Mackenzie (I myself had returned before Easter to Athens to attend the Jubilee of the French School) on the lower parts of the hillock within the wall resulted uniformly in the discovery of house-walls of the latest settlement, themselves running down into the cultivation. Nothing that could be recognised as a return of the fortification was hit upon anywhere.

Our failure to find a strong wall on the eastern slope until ground is reached, which is almost on sea level and so moist that corn will not ripen upon it until a fortnight later than on any other land in the neighbourhood, suggested to Mr. Mackenzie what I believe to be a true conjecture, viz. that these low marshy fields were themselves once a sufficient protection to the city on the east, i.e. that they were covered by a marine lagoon or even fairly deep sea. At that time the city stood on a peninsula, linked to the mainland at the south-west corner only by a rocky ledge, across which a strong wall was thrown and continued at a later period in a less solid form eastward along the edge of the fast drying lagoon. An examination of the coast about Phylákopi will show how the natural change has been effected: in fact the same agency still does the same work. The sea eats steadily into the face of the rocks on which the ancient city stands and also into the basalt hill facing it, and with the rounded spoils of these cliffs banks up a great bar of boulders in the centre of the bay. The bases of the hills all round the little plain of Phylakopi are full of waterworn caves, and it is evident that



once they fringed a sea running much further inland than at present. This bay is now represented by the fields east and south-east of the ancient site. Furthermore on this supposition only can a port be imagined good enough to explain the presence of an ancient city on this north-west coast at all, and especially its position as the great place of fabric and export for the obsidian of the island, none of which is actually found within several miles of the place. Phylákopi nowadays has simply an exposed bay into which no boats will venture except in the calmest weather. The conditions must have been in some way very different in the third and second millennia before our era; and the most likely change that can be imagined is the drying up of a shallow port suitable for the small craft of early days and once sheltered from the west and north under the south slope of the Phylákopi hillock.

The opening up of the South Wall and the trenching of the low part of the hillock to the East occupied nine days, the progress of work being impeded in the one case by quantities of large fallen stones for which place could hardly be found except in the crofts below (where we had engaged not to put them), and in the other by the excessive hardness of the surface soil. I returned from Athens, after a vexatious delay *en route*, on April 26th, and by that time it had become clear that we should find no fortification on the east by surface trenching. Therefore on April 27th I took the men out of the maze of the little late houses in which they were working on the south and east of the site, and gradually concentrated them on to the north cliff. For the present, however, a gang was left to continue clearing in and round an insulated structure discovered in square J 3, which bore some resemblance to a quadrangular tower with two chambers, entered by a good doorway with squared posts. As the character of its walls and all the pottery found hereabouts attest, it and all the structures near it belong to the latest settlement. When the "tower" was clear, we continued to cut north and west of it without going lower than 1.75m. and soon were convinced that it had no fortification character but was just an insulated house. Immediately to west of it we struck a passage, with covered water-conduit running down its axis at a depth of .75, and following it up for some way westwards, we opened out to the south another house with well-built walls, the largest of whose stones measured 1m. by 40 cm. Afterwards we contented ourselves with probing for the conduit at intervals, finding at one point of its

channel (west edge of H 3) quantities of broken vessels of Mycenaean period evidently brought down by the water from the higher part of the site. Finally, as the channel was not different to others in the upper town and was not likely to lead to any gate or point of importance, we desisted from its further exploration on May 10th. All this central part of the lower site is crossed at intervals by long straight walls of small stones bonded with clay with no face on the upper (west) side. Their upper courses are flush with the surface, and they cease at a depth of about .75, resting on no foundation. They have no connection with the fourth settlement passage and watercourse just described, which indeed are crossed by two of them obliquely. There can be no doubt, then, that these walls are the latest constructions on the site, and it seems probable that they have served to bank up the soil in terraces for cultivation plots. But except that they are later than what we regard as the uppermost "Mycenaean" settlement, they must remain of uncertain date, their structural character being equally that of modern Melian terrace walls and of late "Mycenaean." From all this low part of the site nothing more than broken pottery of the later Mycenaean period and rough stone utensils was obtained, excepting some steatite vessels and fragments, found outside the north wall of the insulated house at a depth of 1.50 m.

We may turn with relief—as indeed we did turn on April 27th—to the part of the site on which our more thoroughgoing work of the season was to be done, namely to the north cliff. A beginning had already been made there with the second "trial trench," in sinking which a complete fourth settlement house had been laid bare in squares J 1, 2: under it were found walls of both the third and second settlements and a layer of pottery, underlying all the constructions. Here at any rate we were on a part of the site which had been settled from the earliest time. The floor level of the latest town lay hardly more than .30 below the surface: the less important partition walls had no deeper foundation, but the more important were found to be carried down about 1 metre and to rest on either a course of large boulders from the beach, or a bed of small sea-shingle and sand, or occasionally the top of earlier walls. The latter, the well-built remains of the third settlement town, were thus reached usually in this part of the site at from 1.50 to 2 m. below the surface: and with their foundation courses they went down till either rock or walls of the

second settlement appeared. In the deepest place under the house in question the foundations of the third settlement lay at 4.50 on a bed of sand and pebbles. Then after a belt of earth 1 m. thick containing hardly any sherds, scanty remains of more walls came to view, resting again on earth mixed with sherds. The rock was found at 6.50.

The distinctive character of the three settlements of which we have found structural remains never leaves room for doubt on any part of the site.<sup>1</sup> The earliest (*i.e.* the *second* settlement) appears to have been much the least extensive; and probably, like other settlements of the same primitive period in the islands, it was not fortified. If we may judge from the intervals, at which our deep trenches revealed its constructions under those of the third settlement, its habitations were few and widely spaced. The occurrence in several places of a belt of earth, hardly containing any sherds, argues that, after a catastrophe, the site lay for a long time desolate, left to the action of natural silt. The accumulation of this must have been very slow; for the site is arid, and the prevailing current of air comes off the sea, bringing spray not dust. In fact in the case of the latest settlement we find that at least two and a half millennia have overlaid it with less than half a metre of deposit. The city of the third settlement when it came into being, was of a very different type, a city of fortress-builders, able to lay out their constructions at right angles, to square and to fit their materials accurately, to build their walls plumb, and to engineer a water system. The great fortification was the work of these men, and it marks the most flourishing period of Phylakopi. But between the first settlement of these fortress builders and the change which led once more to the founding of a new settlement above theirs, a long succession of years must again be supposed: for the contents of the houses represent many stages of development. The characteristics of this and the other settlements and of their pottery will be treated more in detail in the subsequent papers. Sufficient to point out here that since our second and third settlements at Phylakopi, in both methods of construction and contents, correspond closely with certain prehistoric dwellings found in Aegina and Thorikos and described by M. Staes in *Ephemeris Archaeologica*, 1895, pp. 227 ff., they belong probably to a people or peoples who had widespread relations in the Aegean before the great epoch of Mycenae. Contemporary with the last-named period are the scanty remains of our fourth and latest City, between which

<sup>1</sup> Cp. Mr. Mackenzie's paper *infra*, pp. 17-44.

and the third settlement there was interposed a catastrophe, but apparently no long interval of time. In its turn this latest city was destroyed and most of its materials were removed; and, except for cultivation at some period (v. *supra*, p. 9), the Phylákopi site has lain desolate ever since. The port became choked: obsidian had long ceased to be of value; and in consequence the centre of the island was shifted westwards to one point or another on the shore of the great inlet five miles away, where through the Hellenic, Roman, Byzantine and Italian eras it has remained to our own day.

By April 28th we had finished with squares J 1, J 2 and were proceeding with our gangs increased to just short of a hundred men westwards along the cliff top, opening out the chambers from the sea face inwards. This direction of progress was rendered natural both by the facility for "dumping" and by the fact that some sort of street, into which doors opened, ran more or less closely along the existing brink of the cliff. The few chambers opened to the east of the "Mycenaean house" proved ruinous, shallow, and productive of hardly anything but the little plain wheel-made cups of which we were afterwards to get many hundreds: and for some little distance westwards also houses of good character did not appear. But thereafter began that plethora of potsherds, which is characteristic of this site as of all others of a similar period. (In two days we obtained more than was carried to Athens in all the previous season,—a circumstance due in some measure to the fact that we allowed nothing to be thrown away before being washed.) Among the sherds were many with finely painted marine motives, but no whole vases appeared except the plain cups.

As we proceeded westwards the remains of the latest city became deeper, the floors of hammered mud (occasionally also of slabs of schist) averaging 75 below the surface. Good painted ware became common from the uppermost or fourth settlement, and by the beginning of the succeeding week (May 2nd), we had opened out deep well preserved chambers of the third settlement city in H 1, which, however, had been dug into before our time: for there was a clean-cut trench in the earth deposit, filled loosely with rubbish. On Tuesday, May 3rd, we came upon our first considerable find of complete vessels, all on the latest floor-level of two small rooms—in the one a large painted bath-shaped urn, recalling a Cretan "larnax," which broke only when the supporting earth was removed; and in the other a number of painted vases and lamps, protected under the bulge of a wall. The yield of potsherds had come to



directed mainly to opening out the banks east and south of the upper terrace. That on the east proved to contain an entrance to the upper building with flanking chambers; a long narrow passage running south from the cliff edge served both as approach and drain; and on the other side of the strong supporting wall of boulders which bounded this on the east was another group of chambers which we were to open later with signal results. The south bank also contained a narrow passage but was found to be more steeply terraced, and immediately below it began a series of chambers of which we had only time to dig out two. From their not remarkable contents, among which were some two hundred plain cups found lying in *rouleaux* one within the other, they seem to belong to the latest settlement. From two points in the south bank we ran trenches across to the fortification wall on the south in order to determine the character of this part of the site. It was found to be, like the low part on the east, full of house remains of the late period, the substructures often alone remaining. We cut down a long passage running south, and up a passage with drain falling to the south-east, and round an *insula* very like that in the east centre (*v. supra*), but obtained nothing but potsherds. This part of the site has been at some period carefully levelled for cultivation. Stones have been gathered off its surface and walls destroyed. The earth is hard and very deep. In another season it might be probed more thoroughly in order to determine whether remains of the third and earlier settlements underlie the later here, but judging from the character of the southern fortification at this point, all the lowest part of the town is a late extension, and will not equal the upper part either in interest or in the number and value of the objects found.

As the last week arrived, for which our funds would hold out, I determined to concentrate labour on the two high terraces, the northern and southern edges of which had been already explored. Here was our best chance of finding characteristic objects belonging to all the settlements. From the upper terrace the superficial layer had already been removed, and on the 18th gangs were set to sink shafts in several places through the remains of the third settlement city, whose existence in this region we had already established, down to the rock. The second layer (third settlement) proved at once remunerative: vase fragments painted with birds and fishes, bronze tools, several complete strainers and other vessels rewarded us; and as we approached the rock (here uniformly at 4 metres below the

surface) we obtained good incised vases. But the most remarkable finds were to come from the lower terrace. We had hardly concentrated the men upon it when early on the 19th, on the mud floor of a late settlement house, at a depth of '80, was found the "Fishermen Vase" (Plate II.). The lowest stratum (4 m.) of other chambers near at hand had been yielding good incised ware for two days past, and from the lower levels of the third settlement city had been emerging many flat painted bowls, a fine steatite lamp, and other good vessels. The surface earth yielded painted fragments in profusion, and, for the first time, some saw-toothed flint knives. Half way across the terrace, digging to the southward, we struck an axial passage, and on the 21st began on a fresh group of chambers beyond it.

As we were digging this part of the site rather for the chance of vases and other objects than for the plan, we had gone down to the rock only where the spaces left between walls of various epochs rendered sinking easy, and after a little experience did not descend lower than the foundations of the third settlement city wherever these rested on a bed of shingle. For in no such case did we find anything below until rock was reached. But in every chamber, except the small room where the "Fishermen Vase" was found, we dug out thoroughly the remains of the third settlement, and in four or five places penetrated to the second settlement. In fact unless walls are to be destroyed wholesale, this is the only method of exploration possible on those parts of the site where the three (or four) settlements are superimposed one on the other. To get a complete plan of the two uppermost is easy: to get a complete plan of the two lower strata is all but impossible, but their character and that of the objects in them can be amply established by occasional shafts.

With only three or at most four days work still before us we began on the new chambers south of the axial passage on Saturday the 21st. Here the latest city has left but very shallow remains, and the top of the walls of the third settlement emerge at less than a metre below the surface. Almost at once the finding of a piece of fine stucco, painted with marine growths on a white slip, warned us that we had opened a room of better quality than any found hitherto, for though this was not the first stucco we had noted in the third settlement city, it was the first with design. The whole of our now reduced staff of workmen was accordingly employed until the close of the excavation on Thursday, May 26th, in

clearing as many of these chambers as possible down to the floor level of the third settlement, which lies at about 2 metres. In two cases the men were able to descend to the rock, which here lies only  $3\frac{1}{2}$  metres below the surface, and  $1\frac{1}{2}$  metres below the floor of the third settlement. The remains of the uppermost settlement, almost on the surface, included two small built up water tanks, which were left *in situ*, as were also all the walls. But cutting through the mud floors we descended into the rooms of the third settlement, three of which had been stuccoed. Of these one contained only a few fragments of strong, stont plaster, painted in broad bands of plain colours, red and black; but the two other rooms, of which the one led into the other, had more elaborate designs. The first yielded dark crimson stucco, on which appeared a design of white lilies with yellow pistils and stamina: the other, in which by far the largest amount of stucco was found, gave us remains of broad bands of plain colours, blue, green, black and red, relieved by stripes and pricked lines. But also there were remains of a band of design, flying fish represented among marine growths such as sponges in a sea indicated by the presence of blue bubbles. A human figure, of which we found only the outlined hands and part of the braceleted arms to the shoulder, seems to hold a net, but not in the same band of design.<sup>1</sup> All this crumbling material was lying among the earth in the chamber, mostly face upwards, at different levels varying over nearly a metre, having fallen gradually from its place. No single piece still adhered to any wall. The earth being packed hard, it was impossible to get out the stucco except in small fragments, work as slowly and carefully as we might. The fragments vary much in thickness from 8 cm. to 16 cm., having been fitted to the inequalities of the rough backing. This chamber had the further distinction of possessing a square pillar, standing free on a roughly-rounded base in the centre of the east end of the room. What is left of it is built of two poros stones, '60 square and respectively '66 and '57 high. Before the end of the work we found an exactly similar pillar in the east end of the large chamber at the north-west corner of this group. This pillar is beautifully squared—the best bit of masonry in fact yet found at Phylakopi. It is preserved to a height of '93 and is '45 square. Not far from it in the same room was found a round base of the ordinary Tiryns type, but not *in situ*; and

<sup>1</sup> Cp. pp. 26, 27, *infra* for fuller description.



in a third chamber adjoining are remains of a ruder specimen of these bases, but this time probably as originally placed. Very little pottery was found in any of these rooms, but such as there was belonged to the later period of the third settlement. Time did not permit of these chambers with their novel and singular features being finished. It remains to dig deeper in all but two, and to begin from the surface on the southern half of this block of buildings. That done, it will have to be considered to what extent the lower parts of the site, south and east, shall be cleared.

## II.

## THE SUCCESSIVE SETTLEMENTS.

BY D. MACKENZIE.

When we began excavation at Phylákopi in 1896 we did so with the great advantage of knowing from what was visible on the surface that nothing would be found on the site that was later than Mycenaean. This fact simplified vastly the problem of excavation as compared with that offered by sites like Mycenae and Troy. The evidence we were in search of was presented from the surface downwards without any later admixture. Thus we had our attention directed exclusively to prior questions in which the problem of the Mycenaean civilization would present a final stage.

Already in 1896 a distinct stratification in deposit and wall had been observed at the west end of the site, though the breaking away of the rock at this part through the action of the sea had so much disturbed the natural formation of the deposit that hardly any of the finds from that region could safely be coordinated with the evidence from the stratification of walls, except such objects as were found near the fortifications, or deep down in those chambers that had walls fairly well preserved (*Annual*, III. p. 9).

In 1897 the evidence forthcoming was of a much more definite and reliable nature, and the excavation of the undisturbed region outside the fortification wall at the west end of the site (*Ibid.* plan A—D 5), and the clearing up of some points inside the fortress, led to the recognition of at least three distinct strata of wall and deposit at this part (*Ibid.* p. 13). The formidable task of clearing the undisturbed exterior of the strong wall at A—D 5 brought us reward in the knowledge of its gradual construction, which has not been increased by subsequent examination of the less well preserved continuation further east. The actual finds on the other

hand were not of the same value or abundance as those made in the succeeding season deep down in the rooms within the citadel; for not only was nothing whole to be expected, but the evidence supplied elsewhere by housewalls and definite floor levels was naturally lacking outside the fortress. As the too short excavation season of 1897 was drawing to a close, and we found that we must aim at such a surface plan as would give a fair conception of the whole further space at our disposal for excavation, we had to content ourselves with surface results, that could throw little light on the question of stratification, and only at one or two points were we able to penetrate beneath the Mycenaean level (*ibid.*, p. 18, plan D 3, 12 and C 5).

From this point of view it is fortunate that we can now supplement the evidence from the excavations of 1896-7 by a study of the much richer finds of 1898, made at different levels on those much better preserved parts of the site further east, which were not open to excavation in 1897.<sup>1</sup>

#### *The Different Wall-strata and their Deposits.*

In considering the evidence for different stratifications of deposit and wall at Phylakopi it will be convenient in a preliminary survey, to follow the order in which such evidence was brought to light, and to work from the surface downwards. After this evidence, however, has been briefly reviewed, and when the objects found have to be exhibited in their general connection with the sequence of strata, regarded now only from the point of view of successive settlement, the natural order of development must be pursued, beginning with the earliest deposit on the rock and ending with the latest stratum below the surface.

1. The Mycenaean deposit next the surface is a uniform fact all over the site, requiring no further verification in a preliminary report, and accordingly we have here only to note such characteristics as were not prominent at the west end of the site. One such characteristic is afforded by the existence in the lower east half of the site of isolated houses, by which this quarter is distinguished from the upper citadel of the west end with its large complex of connected apartments (plan, A—F).

<sup>1</sup> The huge disproportion between the rich finds of 1898 and the comparatively poor ones of 1896-7 is easily understood when we remember that the well-preserved houses of the east half of the site (F—M) are only matched by the exterior of the strong wall at the west end.

Here has to be mentioned the Mycenaean house of several apartments, with well preserved cement floorings brought to light at J 1—2, at from 25 to 50 centimetres from the surface. At K 3 a much smaller house of only two rooms was characterised by the finds as also Mycenaean.

2. The rooms at the north end of the Mycenaean house at J 1—2 had no cement flooring, but at the same level as the cement flooring of the other rooms the soil was found to be very tough, as if much trodden, and when this was removed a new set of walls began to appear, having no connection and no correspondence with those above them. At G 3, 1—3, is a third Mycenaean house of three rooms; and below it, with a similar though not exactly coinciding system of walls, appears what must be regarded as the most important architectural discovery, up till now, in this second stratum—a complete house with important wall-stucco matching the houses of the first or Mycenaean stratum. At H 1, 1—5, again, very near the shore, appears a house of the second stratum which, with its low arched doorway between rooms 3 and 4, is much better preserved than the building of which there are traces in the Mycenaean stratum above it. This second stratum was afterwards gradually verified everywhere to the west of the house at J 1—2, but to the east of it the ground has not been tested below the Mycenaean level.

3. On the complete excavation of any space characterised as belonging to this second stratum it was found that, sometimes after an interval of deposit, sometimes not, a still earlier system of walls always came into view, having no direct connection with the system above it. A typical case had already occurred the previous year at B 5 (*Annuaire*, III. p. 17) having a capital importance, as we shall afterwards see, through the coincidence with it of the great obsidian deposit at B 5, 3. An important addition to our knowledge of this third stratum was made in 1898 in a series of rooms in G 2. Here in space 1 there is only one wall belonging to the first stratum, that bounding the space on the west side, which goes down 1.30. Below this on all four sides of the space appeared a lower set of walls with traces of plaster, going down to a depth of 2.60 from the surface, the north wall having a door-way which had afterwards been built up. Then came an interval of deposit 35 centimetres deep, below which began a third set of walls going down 65 centimetres to the rock. The pottery from this third stratum of walls, the most typical specimens of which had large geometrical patterns in lustreless black paint on a pale

slip, has to be co-ordinated with the fine incised hand-polished ware from the corresponding stratum in the neighbouring spaces 2 and 3, and this again with the incised fragments found the previous year at D 3, 12.

4. Up to this stage of our enquiry we had been accustomed to expect the virgin rock after the appearance of a third stratum of walls like the above. At the Mycenaean house at J 1-2, however, the third stratum of walls whose foundations were at a depth of 4.90 from the surface did not as elsewhere rest upon the rock, but upon what turned out to be a still earlier deposit which went down without any walls at all to the rock at a depth of 6.50 from the surface.

Having recorded typical evidence for this wall stratification, and having at the above point come upon an earlier deposit than has yet been discovered at any other part of the site, it will be convenient to pass in review the pottery and other objects found at different levels here and elsewhere in reference to this stratification, and in the natural order from the lowest to the highest stratum. In this connection it has to be remembered that the lowest or fourth stratum in the order of discovery is the first in the order of settlement, and that the first stratum in the order of excavation has been the last inhabited.

### I.—THE EARLIEST SETTLEMENT.

The earliest deposit at Phylakopi affords evidence of human habitation (fragments of earthenware cooking utensils) without as yet any corresponding traces of walls, and though, when we consider how small a space has yet been excavated, it is possible that such evidence may yet be forthcoming, it is worth while to observe (1) that the early cist-tomb cemeteries hitherto excavated (Oliaros, Amorgos, Pelós) have shown no trace of corresponding habitation near them, and (2) that no primitive settlement hitherto excavated has shown any stratum that could definitely be assigned to the people of the early cist tombs.

What kind of dwellings the people of the earliest cist tombs inhabited has not as yet been made out, but the analogy of the hut-dwellings of Apulia<sup>1</sup> and the cave and hut-dwellings of Sicily<sup>2</sup> does not lead us to expect much in the way of permanent stone structure such as would

<sup>1</sup> Patroni, *Mon. dei Lincei*, viii. p. 419.

<sup>2</sup> Orsi, *Rivista di Paleologia italiana*, 1890, p. 177; *Notizie degli Scavi*, 1898, p. 35.

leave prominent traces of itself under the massive later superstructures of a citadel like Phylákopi. Indeed, Orsi's investigations go to show that the very primitive settlement at Stentinello, with a rich deposit of potsherds<sup>1</sup> bearing the closest resemblance to the incised ware of the earliest stratum at Phylákopi, was equally lacking in any apparent structural traces of the actual habitations themselves.

In one case known to me, however, at Kastraki, in south-west Naxos, an extensive necropolis of cist tombs has adjacent to it considerable remains of prehistoric human habitation. The settlement here is so close to the shore that part of it has been washed away by the action of the waves, the result being a complete section of the deposit at one part. Some of the pottery corresponded to what was to be expected from the type of tombs in the vicinity, while some again resembled what at Phylákopi belongs to a distinctly later date. If the settlement at Kastraki is ever excavated, it is probable that deep down in it will be found a distinct stratum of deposit answering to the contents of the earliest tombs of the neighbouring necropolis, and in that case a sharp look-out will have to be kept for any traces of hut walls. A glance at Patroni's plan of the prehistoric hut-village previously referred to, will suffice to show how easily such obscure evidence can be overlooked or lost, and in that case it is almost inevitable that the corresponding deposit of broken pottery should come to have its separate identity also overlooked in the mass of richer finds from the more clearly marked strata above.

From the analogy of the cist-tombs, objects in marble are those which one would most naturally expect along with the pottery of this earliest era. Such objects are, however, extremely rare at Phylákopi, while at Pelós they do not occur at all. This might perhaps be expected to be the case, in an island like Melos, possessing no marble, just as, on the other hand, one need not be surprised that in Paros and Naxos, with their rich marble quarries, prehistoric vases in marble should predominate over the earlier clay vessels they imitate. Yet even at Phylákopi, the marble vessel is not unrepresented, for in this deposit appeared the marble fragment of what might have been a basin or large bowl simultaneously with a fragment of some implement in hard black stone. At the same level were discovered several obsidian knives, a find which has its importance when

<sup>1</sup> *Ibid.* tav. vi.

taken in relation with the parallel discovery of obsidian implements in the tombs of Pelós.

We have thus confronting one another in this earliest settlement the rarest and the most common materials which Phylákopi has to show. And though, notwithstanding the identity of race which has been already proved between the earliest people at Phylákopi and those of the neighbouring islands, it is not so easy with very primitive finds to verify actual importation and exportation, we can, nevertheless, have no doubt that the marble (which does not exist in Melos) was imported, and the obsidian (of which Melos among all the islands of the Aegean seems to have the monopoly<sup>1</sup>) was exported, already at this early age, and that the latter accounts for the obsidian implements in the cist-tombs of the neighbouring islands.

## II.—THE SECOND SETTLEMENT.

The extensive wall remains of what we must call the second settlement at Phylákopi, in evidence everywhere from the region J 1-2 to the west end of the site, is in marked contrast to the obscure evidence of habitation characteristic of the earliest deposit. Now, the walls belonging to this settlement at the west end of the site are seen to be in no connection with any existing part of the strong wall, which after an interval of earlier deposit goes right over these earlier walls (*Annual*, p. 17, and Plan A, 5, 4). The natural conclusion is that while no longer a collection of detached huts of more or less perishable or effaceable material, such as on the negative evidence from the site itself we have for the present to assume for the first settlement, the second settlement at Phylákopi was not yet a fortified town.

An analogy for this is to be found in Melos itself in the prehistoric site of Samari discovered by me in 1896 (*Annual*, III. p. 86), which presents a complex system of straight house-walls without any trace of fortification and I have in repeated visits found nothing on that site to contradict the conjecture that it belongs to the same era as the second town of Phylákopi. The discovery of a similarly unfortified settlement at Akrotiri in S.W. Paros, with ceramic forms identical with many which at Phylákopi are typical of the earliest strata, is confirmatory evidence.<sup>2</sup> As,

<sup>1</sup> *v. supra*, p. 2.

<sup>2</sup> Since this was written Tsountas has published the results of an excavation made in this neighbourhood, s. *Ep. 'Aex.* 1898, pp. 168 ff.

however, I was able to discover no traces of burial near either of these two settlements, it was fortunate that afterwards at Kastraki in S.W. Naxos I came upon the prehistoric settlement with adjoining necropolis mentioned above. This settlement had in common with the one at Akrotiri in Paros, and the one at Samari in Melos, as well as with the second town at Phylákopi, the very characteristic feature that it also was, as far as I could judge, unfortified. The identity between typical ceramic forms at Kastraki and Akrotiri was very noticeable. In the absence of the relative evidence it is not so easy fully to establish the connection between the Akrotiri and Samari settlements, and the people of the cist-tombs. In the case of the Naxos settlement, however, we have the rare coincidence of cist-tomb necropolis with corresponding settlement, the analogies of the cist-tombs being more with the earliest Phylákopi deposit, while the open unfortified settlement of straight-walled houses has more analogy with the second town at Phylákopi.

The probable explanation is that the cist-tomb necropolis and the adjacent unfortified settlement at Kastraki cover the same period as the earliest deposit and the second, unfortified, settlement at Phylákopi. At the Naxos site, as at Phylákopi, to a primitive period leaving no apparent vestige in the way of wall remains, succeeded a more advanced era when the inhabitants of both sites lived in open unfortified towns.

The only site in Greece hitherto investigated that affords a close analogy to the houses of our second settlement is the prehistoric, unfortified dwelling excavated by Mr. Stais in Aegina (*Εφ. Ἀρχ.* 1895, p. 243) and Mr. Edgar (p. 42) cites the painted geometric vases discovered there (*ibid.*, Pl. X. especially 1-4) as having the greatest affinity with some typical finds of the second settlement at Phylákopi.

In terms then of what the wall-remains record, the progress from the first era at Phylákopi to the second is one in which habitation in a collection of rudely built one-roomed huts that have left no apparent traces of themselves, is succeeded by habitation in straight-walled houses of one, two, and more apartments. These houses are regularly provided with stone thresholds, and all corners have greater security given to them through a careful finish with well-squared poros blocks usually of moderate size. The appearance of plaster lining the rooms, already mentioned, in G 2 and the rooms at A 5, 4 is assurance that we have here already to do with regular house-walls of stone, no longer the mere substructures of



more perishable constructions above them, though, on the other hand, there is nothing to show that all roofs were not of thatch-covered wood.

We arrive at an important landmark in the history of Phylákopi, when we put the great obsidian workshop at B 5, at the west end of the site, (*Annual*, III., Plan), in connection with the second settlement. By this, however, it is not meant that the working of obsidian at Phylákopi began now for the first time, for as we have seen obsidian implements were found in the earliest deposit here as well as in the tombs of Polós. We find the true relation between earlier and later, when we consider that a large industry, with export trade, such as is presupposed in the vast obsidian deposit of the second settlement, could not have been developed all at once after the first landing at Phylákopi. One might be tempted to regard it as characteristic that the settlement which affords us the greatest evidence of the working of obsidian should no more than the earliest deposit give any indication of a knowledge of bronze. In the case, however, of spaces so limited as those in which we were able to examine the deposit even of the second settlement a negative argument must not be founded on lack of evidence which perhaps was accidental; the presence, however, of even one specimen of an object or material, related to parallel evidence from other sites, would be enough to justify a positive conclusion.

What Mr. Edgar calls a geometric period in the pottery of prehistoric Phylákopi reaches its prime in the second settlement. A very distinct transition is apparent in the fact that the primitive incised ware of the earliest deposit, with its crude herring-bone pattern dispersed over the whole surface, never occurs within any part of the wall-region of the second settlement, while, on the other hand, the finely incised and hand-polished ware of the second settlement with its grouping and distribution of the geometric ornament never occurs in the earliest deposit. And it is an equal sign of progress when the ware with geometric ornament in lustreless black paint on a white slip (see p. 41), which is equally typical in the second settlement, shows a similar sense of grouping and distribution of the ornament which has nothing parallel to it among the incised fragments of the earliest class. Two typical examples of the large jar-like vessels with suspension holes compared by Mr. Edgar to the Aeginetan vases figured 'Εφ. 'Αρχ. 1895, Pl. X., and two specimens of the beaked jug cited

also on p. 42, were found at G 2, 1, at a depth of m. 3.50-80, contiguous to clearly marked walls of the second settlement.

Yet the affinity with the ware of the earliest deposit has to be as strongly emphasised. The fine incised geometric variety cited above as found alongside of the new painted geometric species is only a survival of the primitive incised ware of the earliest deposit. The actual specimens, however, two incised geometric vases of the duck-form cited on p. 40 as well as a curious vase of the same class in the form of an ox, were found within distinct wall-areas of the second settlement. The use of "Aegean" linear signs like those figured on p. 12, appears fully inaugurated with the era of our second town, and their level of maximum prevalence, as Mr. Edgar observes on p. 41, coincides with that of the painted geometric ware.

### III. THE THIRD SETTLEMENT.

In the third settlement we have not an open town but a walled city with imposing fortifications, and this is the characteristic feature which distinguishes this settlement from anything that preceded it at Phylákopi. The excavations of 1898, it has been already remarked (p. 17), have not added anything to our knowledge of earlier parts of the strong wall in its continuation eastward, but we have fortunately already ample evidence at the west end of the site. Here the splendid earlier part of the fortifications at A 5, B 5, C 5 (*Annual*, III., p. 13 and Plan), that is, all the lower part of it which shows the small returns in the middle of the deep trench at A 5 and in the east angle of the projecting bastion at B 5, has to be assigned to the third settlement at Phylákopi. On the other hand, this projecting bastion itself (*ibid.* p. 14) and the upper courses of the strong wall, which ignore the small returns characteristic of the lower courses, have to be regarded as of later date.

Once the particular mode of building which we found to be characteristic of the second settlement became traditional there is no evidence to show that it did not survive in a perfected form in the third city and in an after life of decline in the latest settlement of which we have any record at Phylákopi. Here as in the second settlement the straight stone-built

house-walls are rendered more stable by the use of mud plaster, the sides of doors (and windows) being finished off with the same well-squared poros blocks.

Important advances are, however, noticeable. 1. There is a greater tendency to observe the distinction between different courses in the building. A very good example of this is a house-wall in H 1, where basaltic blocks and iron-stone slabs alternate in a way that recalls the "header and stretcher" system of bricklaying. This advanced mode of construction is only matched by the splendid corresponding parts of the strong wall at the west end of the site. 2. An advance in symmetry is noticeable in the relation of the different buildings towards each other which is determined by the orientation of the walls east and west, north and south, in relation to the strong wall. Compare the different directions taken by the earlier walls at B 5 and C 5.

Yet even these advances did not prepare us for the surprises that met us in the way of internal decoration. The example of later times serves, however, to show us that useful traditional forms of common household building are not so susceptible to daring changes as those internal appointments and decorations which give a freer play to the creative artistic impulse. And it is from this point of view that the acme of the different phases of prehistoric civilization at Phylákopi is undoubtedly to be found in this third settlement. Here must be mentioned important finds in wall-stucco painting which were made at the close of the excavation season of 1898, at G 3, in two rooms forming part of the house of the third settlement already (p. 19) mentioned as having a Mycenaean superstructure above it, the later walls having the same plan as, but not exactly coinciding with, the earlier ones. The wall-stucco which was found in rooms 1 and 2 of this house looked astonishingly modern in its fineness and whiteness. The surface, which had been made extraordinarily even, was in the case of room 1 a pure white, in the case of room 2 a fine crimson. On the rich crimson ground of room 2 were painted conventional plant and flower patterns in white and yellow, but nothing turned up of a more exceptional nature. In the deposit of room 1 some very important fragments (Pl. III.) were discovered with lively groups of the brilliantly coloured little flying fish which are common in the Aegean.<sup>1</sup>

<sup>1</sup> Cf. glass-paste ornaments from Spata. *Bull. Corr. Hellén.* ii. Pl. 16. 1, 2.

The variegated colours of the fish were rendered in blue, yellow, and black paint on the pale ground. The basis to the marine landscape was formed by indications of sea-rocks with overgrowth of seaweeds and sponges. The lively naturalistic rendering of the forms and motions of the fishes, combined with what seemed to be a decided feeling for what was typical, prepared one for a greater surprise in the shape of fragments of a human figure in the same technique and scheme of colours, holding some kind of garment or net. Put into connection with the flying fish and suggestions of the sea the figure may have been meant to represent a bather or fisherman, but it seems not to have been in the same band of design. Here as in the pottery of the same period we have got quite beyond the restricted geometric conventions of the previous age, and the lively flying fishes teach us that there is stiffness now only where there have been special difficulties to cope with. If we may judge from the position in which these fragments were found, usually at some distance away from the foot of the room walls, and from the fact that the surface of the fresco is easily obliterated by rubbing, they must have formed part of a fresco going round the top of the walls well out of reach, and on putting several fragments together we found that a border above and below gave the whole fish-composition the character of a fresco-band: the rest of the wall must have been designed in a plainer manner. Towards the east end of room I stood a square pillar well constructed with squared stones whose base, with which also the threshold of the door corresponded, could be taken as marking the floor-level of the room, and it was quite noticeable that when this floor-level was reached the supply of stucco-fragments in both rooms suddenly came to an end.

It has been already said that negative conclusions cannot be hastily founded on the non-appearance as yet of any trace of metals in our second settlement. On the other hand, we can certainly attribute a knowledge of at least lead and bronze to the inhabitants of the third settlement. The fragment of a lead vessel, with incised lines marking the rim, cited by Mr. Cecil Smith, *Annual*, III, p. 12, was found outside the strong wall in deposit of the third town. Nothing it is true was found in bronze more important than a few pins, but such discoveries were made often enough to prove beyond doubt a knowledge of bronze by the people inhabiting this settlement. The ease with which small objects become lost on earthen floors, of itself explains their constant

appearance all over the site, but does not argue that larger and more important objects in bronze, not so easily lost, were not made at this era and would not be found in unopened tombs of the same period.

Household stone utensils, such as rubbers, mortars, pestles, saddle-querns, are objects that one does not expect to find in tombs, but they are the surest index that an inhabited site as a whole is prehistoric. On the other hand, there is no evidence that is more indefinite when we come to particulars, and it is distinctly curious that the greatest quantities of such stone implements at Phylákopi should turn up in the third and fourth settlements. We have not as yet verified their existence in the two earliest deposits, but it would be rash on that account to conclude that utensils of so primitive a nature were not known to the very earliest inhabitants at Phylákopi.

In the pottery the transition from and the continuity with the previous period are equally well marked in this stratum (*v.* pp. 43-4).

We have seen that the particular kinds of pottery characteristic of the earliest deposit at Phylákopi never occur within wall areas belonging to the second settlement, and yet the fine incised ware of the second settlement is only a perfected survival of the simpler geometric manner of the primitive herring-bone incisions of the earliest period.

Again the more advanced painted geometric ware of the third town, with its ever-growing tendency towards curvilinear schemes (*v.* p. 44), is only the finished outcome of the simpler painted geometric technique which goes along with the fine, incised geometric ware of the second settlement.

The favourite fine incised geometric ware of the second settlement tends to be exceeded in quantity even in the same deposit by a geometric ware decorated with a lustreless black paint on a pale slip (p. 41), which appears here for the first time.

In the third settlement the victory is complete, and incised ware only survives in coarser household varieties that have no further significant history. Once, however, the now fully inaugurated medium of paint has come to be dominant, all further transformations take place in it alone, and accordingly we have within the third settlement itself, further, only to observe the transition from (1), an earlier phase which is prevailingly geometrical, to (2), a later period in which there is the marked tendency to transcend geometrical schemes entirely, and (3), to pass over to a naturalistic manner that quite prepares us for the advanced art of the wall-paintings.

1. At the beginning of this series, as an example of continuity with the previous period, stands the type of hand-polished flat bowl with geometric pattern in lustreless black on a pale slip, cited on p. 43. Most probably the type originated in the second settlement but some of the whole specimens have turned up in the third settlement.

A similar continuity is evinced by the ware in which we have geometric pattern in lustreless black paint on a white slip covering the whole surface. The most typical whole specimens were the cups found deep down in the deposit of the third town in the house, already mentioned, at H 1 room 3.

2. The ware (p. 44) with partly geometric-curvilinear and partly organic schemes of ornament in lustreless black on pale yellow clay or slip, of which sherds have turned up in such vast numbers and which is the dominant ware of this period has, owing probably to its delicacy and thinness, not been preserved in whole specimens. It is quite certain, however, that it never occurs earlier than in the deposit of the third settlement.

3. The more advanced class cited p. 45, in which a red pigment is combined with dim black on what is now a pale ochre ground, belongs with its dominance of organic forms undoubtedly to the same ripe period as the wall-paintings. A filler with complex spiral pattern, in red and black on the ochre ground, was found at the top of this stratum at G 1. The bell-like vessel with a sunflower corona of petals alternately red and black on the warm ochre ground of the interior was also found high up in the same deposit at F 2, 1. At G 3, 1, in the second room to the west of the rooms with the wall-stucco, at the foot of a square monolithic pillar similar to that in G 3, 1, were found at the same high level as many as three specimens of this bell-like object of a very much larger size and with a large spiral meander in red instead of the corona. Belonging to the same class as the latter as regards ware and technique is a very large kind of oval terracotta bath with the same ochre slip and the same system of large spiral meanders painted in broad red bands on the inside of the vessel, while lower down appears a characteristic motive in the form of plant stems, in the same red paint, going up from the base all round. It is characteristic, however, of the way in which one settlement at Phylakopi is superimposed upon the other without any violent break of continuity, that the most complete example of this kind of "bath" was found at F 2

at a depth of only 30 centimetres from the surface. Similar vessels are known from other sites, and the fragment of a bath with a wave-line in red on the outside, cited *Troja*, p. 101, as Mycenaean, probably belongs to the same high level as ours.

#### IV.—THE FOURTH OR MYCENAEAN SETTLEMENT.

The fourth settlement at Phylákopi was, like the third, a walled city. We have the same orientation of buildings east and west, in harmony with the general direction of the Strong Wall, and for a considerable part of the site the same area is covered.

A similar method of architecture continues in vogue, and over a large area in G 1-2 and H 1 the latter walls actually follow more or less the lines of the earlier ones. In one case, indeed, the house with the wall-paintings, a dwelling of the latest settlement, has, as we have noticed already, the same plan as the earlier one, though the two sets of walls do not exactly coincide with each other.

Here we have to record a certain hurry and carelessness of building as compared with the more careful construction of the earlier walled city. Though the chief reason for following older walls must have been to secure more stable foundations, the builders of the late house at G 3 did not take the trouble to follow the old lines of wall exactly, though the fact that they in general follow the same plan, shows that at the time of building they must at the very least have been aware of the existence of the earlier much better constructed house. Repeatedly over the site, where a later wall follows the line of an earlier one, it is found to project on one side or the other. We must, however, discount the fact that where the later plan is entirely different from the earlier one, a wall without an older sub-structure is sometimes seen to have rough foundations, often constructed of large sea-washed boulders. Yet, even if we leave this rough foundation work out of account, we find that we have nothing to compare with the fine construction of alternate layers of basalt blocks and ironstone slabs which characterized the earlier walled city, especially at H 1, nothing so good as the careful finishing of corners and the sides of doors which we found inaugurated even in the second town. We have nothing more than a careless reminiscence now and then of the basalt-block-and-slab work,

while the unstable sea-pebbles are made use of in wall construction, as distinguished from foundation work.

That the general plan was on the whole similar to that of the earlier city appears from the instances of detached houses at J-K 3, at J 1 and at G 3, indicating the lower town, and of large complexes of buildings at E 3 and F 2-3, which must be connected with the more important upper town at the west end. The fortifications of this latest city have, in 1898, been traced out all the way to the east end of the site,<sup>1</sup> and though here it has not as yet been ascertained whether they follow the general course of the earlier fortifications, it was already in 1897 made out for the west end of the site that the later superstructures, that is to say, all those upper courses which neglect the small returns in A 5 and in the east angle of the bastion at B 5 as well as this bastion itself, are hardly more than repairs of the earlier wall.

The contrast in this respect to Troy is very marked, for there (*Troja*, 1893, plans I. II.) no part of the Mycenaean city corresponds in plan with the earlier walled town, and three village-like prehistoric settlements intervene to break the continuity between the earlier and the later city. Yet even at Phylákopi, though there seems in each successive settlement to be a closer reminiscence of what has preceded, it is hardly possible that later walls which follow the course of earlier ones without exactly coinciding with them, could have been built at a time when the earlier walls were as yet free of deposit. This is particularly true of the fourth settlement, and especially of the Mycenaean superstructures above the house with the wall-stucco at G 3 and above other houses in the same neighbourhood. Actual restoration on a large scale is noticeable only at the west end of the Strong Wall. The Mycenaean people of Thorikos, according to Stais (*Εφ. Ἀρχ.* 1895, p. 230), seem simply to have repaired and reoccupied a pre-existing fortress corresponding on a very small scale to our third city.

The later parts of the Strong Wall tell the same tale as the house walls within the citadel: no part laid bare in 1898 at all equalled the solid construction of the earlier fortifications at A-C 5. As regards internal plan and arrangement, however, there are certain marked improvements, and the Mycenaean house at J 1-2 is an advance on anything we have as yet

<sup>1</sup> Cp. p. 18, *supra*.



noticed in the earlier walled town. Like the house with the wall-paintings it also looks south, but it has several advantages over the earlier house. (1) It has, on the left, a separate corridor going along the whole length of the house to the back-rooms at the north end. (2) It has its doors alternating right and left from room to room. (3) It has an open court in front such as has not yet been made out in the earlier walled town. (4) The well-preserved cement floorings of the house at J 1-2 have nothing to equal them in any trace of flooring we have as yet come upon in the earlier city. The people who built the later house at G 3 simply repeated the plan of the earlier house with the wall-paintings. Those who built at J 1-2 disregarded all earlier plans and so left themselves scope for the improvements we have noticed. The column base found *in situ* at E 3 is a suggestive complement to the extensive suite of paved apartments which came to light in 1897 at D 2-3, E 2-3.

When, however, we come to decoration we have to prepare ourselves for disappointment, for the extensive researches already made at this level go to show that the latest settlement at Phylákopi is uniformly too near the surface for us to expect any very extensive preservation of house-walls. Here we have ■ content ourselves with the hope of isolated finds, and in this respect, not to speak of the bronze statuette of 1897 (*Annual*, III., p. 26), we have had in 1898 in the discovery of the "Fishermen" vase at least one signal success that fairly rivals in interest the discovery of the wall-paintings of the third town.

The highest stratum of all at Phylákopi is characterised by a survival of the principal species of pottery we have found to be typical of the third settlement alongside of other varieties that appear for the first time, and indeed increasingly in conjunction with imported, and as a rule mature and even late, Mycenaean wares which never appear in the third settlement. For this reason it is more convenient when dealing with a site of this nature, to restrict the name Mycenaean; and at Phylákopi we limit it to the fourth settlement, and to the objects found in the well-marked stratum of walls next the surface in conjunction with wares that can be recognised as imported Mycenaean (s. p. 47). In this sense also the pottery from the deposit of the third town is still pre-Mycenaean.

Two moments have to be distinguished in this fourth epoch. 1. The earlier period of apparently continued prosperity in which the native wares predominate, and still on the whole preserve the high level they had

reached in the third settlement. The continuity with the third settlement is apparent in the fact that some of the most mature types in Mr. Edgar's third class (pp. 44-7) really occur in the deposit of the Mycenaean city. So notably several whole examples of the later deepened form of pouring bowl, with geometric pattern on the rim, but now without hand polish. Again in the second half-metre of the trial trench at E 3 was found the lower part of a vase of the pale yellow Melian variety on which below the break, painted on the pale yellow ground in polished red, outlined with lustreless black paint, appeared two feet in profile, wide apart, which had evidently been part of the figure of a man striding to the left. The stem of a tree in the same technique was also discernible in the free space on the other side. The interesting "Fishermen" vase (cited p. 46) was discovered at G 2, room 4, at a depth of only 80 centimetres, and immediately above a well-marked flooring, with a door threshold corresponding, which completely separated the deposit here from the stratum next below it, belonging to the earlier town. Though, however, its provenance assigns it so decisively to the Mycenaean level, it is more important to note the fact that the characteristic pale yellow clay marks out this vase as native Melian work, and that it accordingly still belongs to the local wares of Mr. Edgar's third class. Taking this class as represented, not in the deposit of the third city but at the Mycenaean level, what we find is, that it is a later phase of the same technical skill as was evidenced in the wall-paintings of the third settlement that, in such splendid instances as the "Fishermen" vase, still survives at this higher level before the influx of the Mycenaean wave of civilization finally put an end to all native artistic endeavour at Phylákopi.

2. We have now the era of decline, in which native fabrics tend to disappear, and Mycenaean importations tend more and more to predominate until at last they hold almost exclusive sway. Here we need not expect any direct continuity with what has preceded in our earlier stratum, nor even with what is native at the same level. Accordingly with Mr. Edgar's fourth class of wares (pp. 47-8) we do not usher in the civilization of the fourth city, but present the record of its decline.

The only transitional forms we need look for are those in which an imported object is imitated in native material. We may take as

illustrative, a double-wicked Mycenaean lamp, of a type that never occurs in the earlier settlements, though in its brown hand-polish we have a technique that, with a curious adaptability to new circumstances, has a continuous history from the earliest epoch at Phylákopi. The lamp in question was found at the close of the excavation season of 1897 at E 3, at a depth of only 25 centimetres from the surface. The type is familiar from other sites, and several very similar specimens are to be found in the Mycenaean room of the Museum at Athens.

With the discovery in 1898 of two specimens in stone, we come unexpectedly upon new data. The one which was of a soft pinkish, possibly native, volcanic stone, had such a low basis that it looked almost like a bowl. The other, found at G 3, at a depth of m. 1.10, was in bluish-black steatite, with a much taller foot, which gave the whole a bell-like appearance. With the steatite lamp we come once more almost undoubtedly into the class of imported objects, and the hand-polish of the earthenware lamp may have been in imitation of the polished surface of such steatite importations. Steatite is not known to exist at all in Melos or in any islands nearer than Tenos, and since both steatite of this particular blue-black variety exists, and articles in it are very common in Crete, it is a natural surmise that such objects at Phylákopi were probably imported into Melos from Crete. A number of fragments of bowls have also been found in this material, and two have exactly the same blossom-like form as the one from Crete published by Mr. Evans, *Cretan Pictographs*, p. 123, Fig. 123. One specimen which is entire diverges only in the kind of spiral fluting which it has on the outside. All these stone bowls are very thick in section and hollowed out in such a way as to hold no more than a cup. But this is their only analogy with the prehistoric marble vases so common in Paros and elsewhere. These marble vases are exact reproductions of a typical form of earthenware vase which, as we have seen, at Phylákopi only occurs in the very earliest stratum, while at Paros the earthenware vase and the marble imitation occur together. The steatite bowls of Phylákopi, on the other hand, never occur except in the latest deposit of all. The fact that they, with the steatite lamp, were all found at the level of imported Mycenaean ware points to importation, and their material connects them with Crete, so that in turn one is led to conclude that the other imported Mycenaean ware found simultaneously with them must also have been derived chiefly from Crete. The

"Kamarais" were cited p. 47 affords indication of such importation even at an earlier date.

We have thus the possibility of an hypothesis as to what one of the principal influences was, which may have combined with other causes to dominate and finally to submerge the earlier native civilization, which, judging from the richness of the finds marking the transition from the third to the fourth settlement, must have been at its prime just as those exotic influences began to make themselves felt.

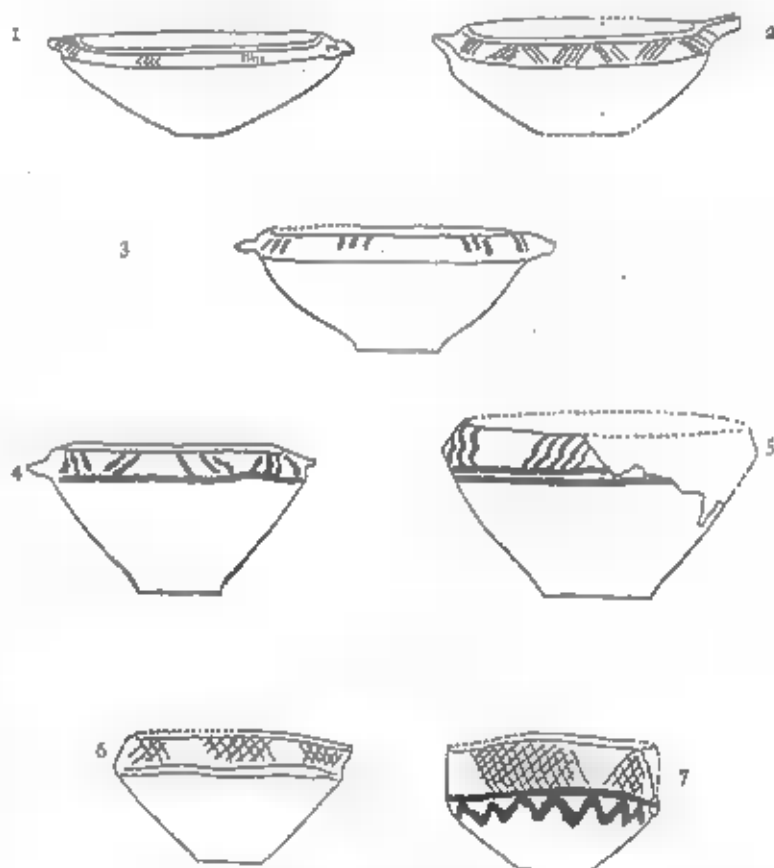
The early legend which extended the sea-empire of Minos until its power and terror were even felt at Athens has to be connected with the existence in Crete of such Mycenaean strongholds as Knossos and Goulás, and such a Mycenaean Empire of the Aegean sea would hardly have been without its dominating influence on neighbouring settlements like that of prehistoric Melos.

The chief source of prosperity at Phylákopi must have been the large industry in obsidian implements, depending as it did on such vast natural supplies as those at Komía and Adamanta.<sup>1</sup> None of the neighbouring islands possess obsidian in the natural state, and not even Crete has as yet been shown to be an exception. Accordingly we may ascribe to Melos a large export trade in obsidian, at least to all those neighbouring islands and probably even to Crete, in the prehistoric eras of the second and third settlements when the working of obsidian was at its prime.

We have seen that even the third settlement yielded surprisingly little evidence of so wide a use of bronze as would already dispense with the continued employment of obsidian implements of such excellence as those found in the corresponding necropolis, but a great advance in the bronze industry has to be pre-supposed before we get into the later epoch of the fourth settlement. The production of such weapons as the chisels, three in number, found in 1898 in the Mycenaean deposit at F 3 would be sure in the end to interfere with the continued use on a large scale of obsidian implements, for with such finds we are brought at once into touch with the rich industry in bronze weapons evidenced by such discoveries as those made at Mycenae. With the failure of the obsidian export trade at Phylákopi would disappear the internal prosperity of the settlement, with a consequent failure in native energy which is very exactly reflected in the decline of all other native industries before the advancing

<sup>1</sup> For some account of the obsidian quarries of Melos, see *Annuaire*, III., p. 77.

tide of Mycenaean importation. The end had come at Phylakopi when it no longer had anything to export, but all to import; and consequently it is no surprise to find the exclusively late Mycenaean wares at the surface giving evidence of a decrepitude and decay to which no later renewal of life was ever destined to succeed.



Scale about 1 : 3.

FIG. 2.—SERIES OF MELIAN BOWLS.

No. 1 is a good specimen of the type described on p. 43, the shape very flat, the rim nearly horizontal, the surface-colour a lustrous red. No. 2 presents the same type with a different pattern. No. 3 is a slightly degraded example; it stands higher, the pattern is coarse, the surface rough. Nos. 4-7 are all made of the light-coloured clay of the later period, are wheel-turned, and illustrate the gradual deterioration of the type. The apparent suspension handle in 4 is not really pierced, in 7 it has diminished to the size of a crushed pea. Nos. 5 and 7 have a coat of reddish paint inside. The design on the exterior is in every case painted in lustreless black.

## III.

## THE POTTERY.

BY C. C. EDGAR.

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Perhaps the main interest of the prehistoric deposit at Phylákopi consists in the fact that of sites hitherto excavated it alone covers the centuries which separate the Mycenaean age from the earliest culture known to us on Greek soil. To discover a few landmarks between those two limits and provide as far as possible a scale of comparison by which to determine the relative date of more isolated finds has been one leading aim of the excavation. For such a purpose no other material is so important as pottery, merely because no other material is so plentiful; in houses and tombs alike it is the one thing that is never lacking.

Like all other sites of the same character Phylákopi has yielded an immense harvest of pottery. It is true as usual that for one vase whole there were a thousand in shivers, and that for every fragment of any individual interest there were many hundreds of none. But as an accurate history of the pottery was aimed at, it was made a rule that every sherd should be preserved for the time being. Each day's yield of some forty or fifty basketfuls was washed the following day, fragment by fragment. The cleaned heaps, kept separate according to the depth at which each was found, were then looked through, a liberal selection was made for further study, and a rough record kept of what was then thrown aside.

By this process of sorting we gained a fair idea of the chronological order in which the various kinds of pottery stood relatively to each other. The general rule that a difference in depth means a difference in age did not indeed always hold good. On the north side of the site, for instance, the débris of two or three settlements was worn by sea, wind and rain into a slope of varying steepness and the relics of very different ages lay equally close to the actual surface. But over the greater part of the site the conditions were

favourable, that is the deposit was undisturbed and the data were innumerable. For the sake of stricter accuracy we sank two trial trenches at some distance from each other, at E 3 and J 1-2, removing the earth carefully layer by layer half a metre at a time; the potsherds from each layer were then classified and counted. The purpose of the present paper is to give a short outline of the results arrived at by this test and confirmed by observation of the daily yield.

(1)

The range of pottery represented at Phylákopi is sharply defined. A lamp and two or three sherds of the classical age were picked up near the surface, but with this accidental exception there is nothing later than Mycenaean, not a fragment for instance of Dipylon ware or proto-Corinthian. In one respect this fact is remarkable, because nowhere in Greece is the survival of Mycenaean art more conspicuous than in Melos; thus, to take the most striking instance, the well-known "Island gems," of which Melos is the main source, must date from a time when the chief Mycenaean centre in the island was already a ruin.

(It may be well to insert a word in advance concerning the use of the term 'Mycenaean' as regards pottery. In the pages of Furtwaengler and Loeschke it covers several very different fabrics, being applied to every kind of prehistoric ware represented in the finds from Mycenae. Thus on the strength of a fragment or two (e.g. *Myk. Vas.* xxiii. 170), it would include all the pottery from Aegina lately discovered by Mr. Staes and described by him with good reason as pre-Mycenaean ('*Εφ. Αρχ.* 1895). On the other hand it does not, as might have been expected, include the early pottery of Thera so intimately related to a group of vases from the shaft-graves. In short F. and L.'s division, if strictly interpreted, is a little arbitrary, and as a matter of fact is not strictly adhered to by other writers.

Suitable names for the various kinds of prehistoric Greek vases will no doubt be settled upon in time. But merely for present convenience and clearness I have thought it best to restrict the term Mycenaean in the following pages to what was by far the most abundant and characteristic kind of pottery found at Mycenae, *i.e.*, Classes III. and IV. of F. and L.'s *Firnismaalerei*.)

The latest class of pottery represented at Phylákopi is then the Mycenaean in this limited sense of the term: the earliest (likewise, though less, familiar) is that primitive unpainted ware, hand-made and hand-polished, which is found in the early cist-tombs of the Cyclades, together with marble vases and idols, and which is the only kind of earthenware that has been found in them hitherto. The trial trench sunk at J 1-2 reached the rock at a depth of six and a half metres or thirteen layers, and the pottery found in the lowest layer, several hundred fragments, belonged exclusively to this primitive class. Traces of the same civilisation had already been discovered in Melos, see an account of several tombs opened last year in the district called Pelós (*Annual III.* p. 35). The earliest pottery at Phylákopi is of the same general character as that from Pelós, being made of very coarse dark clay with a burnished red or brown surface. Although no whole vase could be recovered from the badly shattered fragments, yet most of the types represented are recognizable. The characteristic shapes (*L. c.* figs. 10, 13, 14), occur, though they are comparatively less common. There is part of a pyxis-lid (*L. c.* fig. 16) with an incised pattern of hatched triangles. Some difference was of course to be expected between the furniture of a tomb and that of a dwelling-place. Thus most of the fragments at Phylákopi belong to cooking-pots with sides slightly convex, and to polished plates, some of great size, with a turned-in lip. Many fragments are pierced by a pair of holes close under the rim; others have the usual tubular projections, vertical or horizontal. There are a few incised patterns of the usual kind.

It should be remarked that on the higher parts of the site, with the exception of isolated articles, we found nothing to correspond with this primitive débris, nothing as a whole so early. Here apparently lay the original settlement; later it extended up the cliff side. This evidence that the place was inhabited since the days of the early cist-tomb civilisation till well on in the Mycenaean age is itself interesting, as it bears on a contested point in the Mycenaean problem. Thus Blinkenberg argues that there is a racial break, a gulf of centuries, between the primitive culture sometimes called the "Amorgos" period, and the Theraean or proto-Mycenaean period, while Dümmler sought to prove that the former merged in the latter without any abrupt transition. It may be admitted that Dümmler's premisses were wrong; the links by which he connects his Amorgine finds with the Theraean remains will scarcely hold. Yet his general



conclusion is probably right, as several things in the present sketch may help to indicate. But for fuller information concerning the "Amorgos" civilisation we must wait till Dr. Tsountas publishes the plentiful results of his researches among the islands.

The coarse primitive pottery which was the sole kind contained in the lowest layer, predominates throughout the next three layers also. The sherds that are identical in fabric with the pottery of Pelós and several other cist-cemeteries, belong almost without exception to the types already described. But from other parts of the site we obtained many isolated specimens of what may be called a more advanced stage of the same early class, conical pyxis-lids, vases of the duck form (*eg.*, *Ath. Mitt.* xi., *Beil.* 2, 1), and incised pyxides similar in shape to one from Seriphos, published by Blinkenberg. The Theracan vase figured in Dumont and Chaplain, Pl. I. 5, may be a survival of this type, the projections under the rim being a reminiscence (of very frequent occurrence at Phylákopi) of the discarded suspension-holes. A ring-stand, intended to support a round-bottomed vessel, is something new as regards primitive vase-forms in Greece, though such supports are common in Egyptian pottery. Two vase-bottoms, bearing on the exterior the impression of a reed-mat, were found among the fragments from the twelfth layer—a potter's device which has already been remarked among finds from the cist-tombs (*Annual*, III., p. 62); as will appear later on, the same device is still more characteristic of the succeeding period. Finally it is worth remarking that many of the incised designs at Phylákopi have a filling of white, a familiar mode of ornamentation in Cyprus, Central Europe, &c., but less characteristic of the Cyclades; it does not occur for instance on any published pottery from the cist-cemeteries.

In the same layers, 12-9, were found some finer varieties of unpainted, usually hand-polished ware, both large and small, which may be distinguished from the coarser pottery representative of the Pelós tombs. That which is most in contrast with the latter is a class of thin bowls and saucers made of perfectly levigated clay.

Fragments of painted pottery with simple geometric patterns begin to appear as early as the 12th layer, the proportion (at first one in a hundred) becoming steadily larger. A surprising thing is that on several of these early fragments the paint is lustrous (*Firnissfarbe*), one of the best examples of this being the upper part of a small beaked jug (*Schnabelkanne*).

There is however other reason for believing that the use of glaze in the Aegean area goes back far beyond the Mycenaean period (*J.H.S.*, xi, p. 276).

## (2)

The gap which used to exist between the remains of the "Amorgos" age and the "Theraean" has been partially filled up by recent finds at Aphidna, Aegina, and other places. At Phylákopi, the three general periods of pre-Mycenaean pottery, the primitive, the intermediate, and the Theraean, are represented in one continuous series of vase-fragments. The middle period is mainly characterised by painted pottery with geometric designs. This is much in keeping with what has been noted elsewhere, and it may be concluded that there was a pre-Mycenaean geometric period when the same general style with many local varieties prevailed in the islands, and probably the mainland of Greece. A few fragments with painted geometric designs from Tell-el-Hesi have been assigned with great probability to the Aegean, and it is noteworthy that they were found in a lower stratum than that in which Mycenaean pottery and Cypriote bowls of the white-slip fabric were met with. In the Troad, on the other hand, as is well-known, there are no traces of painted pottery until the days of Mycenaean importation. The early painted ware of Sicily, of which Orsi has pointed out the many Trojan affinities, is certainly related in some way to the Aegean class under discussion. Orsi has been criticised for assigning to the bulk of this Sicilian ware a pre-Mycenaean date (*Röm. Mitth.* xiii, 190), but his view appears to be perfectly correct. Further, the numerous linear signs<sup>1</sup> found at Phylákopi, probably potters' trade marks, are almost entirely confined to the pottery of this period, and so form an important link, which may have some chronological value, between the pre-Mycenaean Cyclades and the south-east corner of the Mediterranean.

The Melian pottery of this class is doubtless of local make. The clay is usually granular and varies in colour between grey and red according to the amount of firing it has undergone; as a rule it is grey in the core and red towards the edges. The design is painted in lustreless black on a white slip, the black turning to red if overfired. As regards the method of manufacture there are no traces of *rapid* turning on the wares of this period, such as would imply the use of the wheel. Many of the larger vessels, and some

<sup>1</sup> See Fig. 1, p. 12.

smaller ones also, bear on the base the impression of a reed-mat on which they must have been planted while the clay was still damp : whatever the purpose may have been, some of the impressions furnish very pretty examples of plaiting as practised by the primitive Islanders. Very characteristic of this period is the shape of the base which is merely flattened and never provided with a ring or profiled foot.

Many of the designs on this painted ware are identical with the incised designs on the unpainted ware of Phylákopi and other places. Although of course the latter are not all of them necessarily earlier than the former, it is still pretty certain that the painted designs as a whole are primarily a development of the incised patterns of the "Amorgos" period. Without illustrations it is needless to attempt more than the briefest description of the designs in question. The greater part of them are rectilinear and angular in character, herring-bone, zig-zags, cross-hatchings, hatched triangles being some of the more common elements; this class may be regarded as purely native in origin. There is again a smaller section of the same fabric in which the character of the design is derived not from the straight line and the angle, but from the curved line, particularly the spiral; in this case the impulse comes indirectly from Egyptian art. The circle occurs frequently, some of the great *pithoi* of this period being adorned with four large sets of concentric circles.

One or two of the more typical forms may be mentioned. The *kernoi*, described by Mr. Bosanquet (*Annual*, III., p. 57), belong to this class, although no example has been found on the site itself; it is unlikely indeed that they were ever intended for household use. The cups of those *kernoi* (*Annual*, III., pl. 4) are elongated examples of the (one-handled) cup which is characteristic of this period at Phylákopi, and which may be regarded as one variety of an early type met with as far apart as Hissarlik and Sicily. We find also large vessels, with suspension holes similar in shape, as in age, to the large Aeginetan vases published by Staes ('Εφ. 'Αρχ. 1895, pl. X). But the most characteristic form of this period is the beaked jug, best known by the German name of *Schnabelkanna*. It is a form that can be traced back to a very early age in the Aegean; not to speak of Hissarlik, primitive vases from Antiparos, Amorgos, and Crete show the general type or a close approach to it. The painted beaked jugs of this age from Phylákopi have a wide circumference and a flattened base; the lower end of the handle is stuck through a prepared hole in the wall of the

vase, and protrudes on the interior, the universal mode of junction in vases of this period that are not intended to be seen inside; the handle itself frequently bears a linear symbol. A vase in the Louvre (Pottier Cat., pl. 29, D5) is a fairly good instance of this somewhat squat type, and ought to be contrasted with the later Theraean type (e.g., Dum. and Chapl., pl. I 3).

The older technique still survives throughout this period, and we find several types of bowls and other vessels with a burnished surface, red or black. Further, the two methods of decoration, the painted pattern, and the surface sheen, are combined in two ways:—

(1) The design is painted in white, more rarely in black, over the polished slip. The technique and many of the designs recall a class of Early Egyptian or Libyan pottery (see Petrie and Quibell, *Ballas and Nagada*). As regards form and ornamentation the vases of this species are to be classed with the ware just described, in which the pattern is painted in black on a white ground. Most of them show the same rectilinear and angular patterns, while on other fragments we find the usual curvilinear schemes. This fabric merges into class I of F. and L.'s "*Firnis-malerei*" which is distinguished by white designs on a red and black glaze. Two interesting fragments, which properly fall within the following period, bear representations of a human figure that closely resemble a contemporary painting (also in white upon red glaze), from Kamarais in Crete: the angular arms and triangular chests reproduce an early conventional scheme, and at the same time distinctly anticipate the "Dipylon" manner.

(2) The vase is covered partly with the usual shining coat, partly with a white slip on which a design is painted in black. The most characteristic example of this technique is a flat bowl with a sharply recurved rim, a short spout at one side, and a suspension hole at the opposite: the rim is smeared with white on the outside and bears a simple pattern which most frequently consists of alternate groups of straight lines and zigzags; the rest of the surface is a shining red or brown, not hand-polished (see pl., *Ath. Mitth.*, xi, p. 31, *Annual*, III. p. 21). The technique is peculiar, but the shape of the vase is by no means a local invention: compare the large pre-Mycenaean bowls from Aphidna (*Ath. Mitth.*, xxi, pl. XV); larger examples of the same type, covered all over with a white ground, were fairly common at Phylákopi also. The form is in fact derived from a

primitive Aegean type and is one link in an interesting series which can be traced into Mycenaean times (see *pass.* p. 45).

(3)

A reference to Fig. 3 (p. 48), will show the comparative duration of the fabrics just described. We take leave of them on the threshold of the early Mycenaean age. A survey of the pottery which next becomes prevalent and which may be best described for the moment as a parallel fabric to the prehistoric pottery of Thera does not incline us to suppose that there was any violent break between the two periods; amid much that is fresh we find older shapes and schemes of ornamentation still surviving and developing. Another fact may be mentioned which points to the same conclusion; the rock-cut chamber-tombs at Phylákopi many of which contain pottery of the early geometric class are essentially similar to the Mycenaean tombs at Nauplia and other places. In fact the hypothesis of a "proto-Mycenaean" immigration from the mainland of Greece to the islands is as yet unsupported by any evidence.

The occurrence of curvilinear designs in the earlier strata has already been mentioned. The spiral was of course known as a decorative element in the "Amorgos" period (*eg.*, *Ath. Mitth.* xi., *Beil.* i. A. 4) and was doubtless in continuous use throughout the Cyclades down to historic times. But there is perhaps sufficient ground for assuming that the curvilinear schemes were as a whole a later phase in the first period of painted ware in Melos and were tending latterly to replace the strictly rectilinear schemes. In the next general period the tendency is fulfilled and the ornamentation is half curvilinear and half naturalistic. A theory has been put forward to the effect that the later geometric style, represented in the "Dípylon" and other fabrics, is derived from an earlier geometric style (of which the Melian is one local branch) which lived on through the Mycenaean interval among the humbler native population (see especially *Ath. Mitth.* xxi. 403 ff.). Whether or not there is any degree of truth in this theory as regards the mainland of Greece, in Melos at any rate the course of things was otherwise; the local geometric fabric gradually changed into an *equally popular and local* fabric thoroughly "Mycenaean" in character.

It is in this period that the use of the wheel becomes general, though many of the earlier vases under consideration show no trace of it. The

clay is light red or light yellow and, as compared with Mycenaean paste, soft and porous; a whitish slip is usually employed. The most characteristic colours are first ■ lustreless black, secondly ■ red (sometimes brown) pigment with or without sheen, the sheen being in a few cases produced by burnishing.<sup>1</sup> These two colours are frequently combined, the red being originally the subsidiary and latterly the dominant colour. White is a frequent accessory.

All this class of pottery is very closely related to the vases of Thera and the unglazed ware from the shaft-graves at Mycenae. Thus the type of globular jug associated with Mycenae (F. and L. *Myk. Vas.* xliv, 5, 6) is very common at Phylákopi, while the Theraean type with breasts and elongated neck (Dum. and Chapl. Pl. I, 3) is almost equally well represented. Nos. I, 4, II, 6, 8, 10, 12 in Dum. and Chapl. are also of frequent occurrence in Melos. A vase from Therasia figured in F. and L. *Myk. Vas.* p. 21 fig. 7 is a good example of a type of which we found hundreds of (unfortunately shattered) specimens, some of them with a handle and spout, but all decorated with the same design, a band of spirals round the body of the vase and a broad cross on the base. Jugs with a raised ring or collar round the shoulder, somewhat like the Marseilles vase (*Arch. Anz.* 1893 p. 9) but far less refined in form, were not uncommon. There were numerous varieties of drinking cups, the simplest type of this age (*e.g.*, Sch. Tiryns p. 70) being particularly abundant; we came on several stores of such cups piled one on the top of another as Mr. Evans found them stored in the Psychro cave in Crete (*J.H.S.* vol. xvii. p. 355); another variety, probably imitated from a metal type, exactly reproduces the form of several gold-cups from the shaft-graves at Mycenae (Schuchhardt, Eng. Tr., fig. 238); the most characteristic type of all was one with a short foot, a flat handle, and a painted panel on one side,—the prototype in fact of the long-footed Mycenaean goblet (cf F. and L. *Myk. V.* xxiv, 176, 177).

The above list, though it is far from exhaustive, will be sufficient to give a general idea of the character of the fabric and its place in history. One other type, one of the most common, may be pointed out as an interesting example of evolution from an older form: in the series on p. 36 (Fig. 2), Nos. 4-7 belong to this period; in many instances the disused suspension-

<sup>1</sup> Part of the pottery of this period corresponds to F. and L.'s *Mattmalerei*, part to the *Firmistmalerei*, Style II. But for the present purpose ■ is more convenient to treat the native ware as a whole.

Column I. represents the imported Mycenaean pottery described in Sect. 4; II. stands for the native pottery described in Sect. 3, the dark portion representing the painted ware and the hatched portion the coarse unpainted ware; III. is the earlier geometric class of Sect. 2. The lower layers were occupied by the primitive fabrics mentioned in Sect. 1. The numbers 1 to 13, arranged vertically, represent the superimposed layers of soil, roughly half a metre each

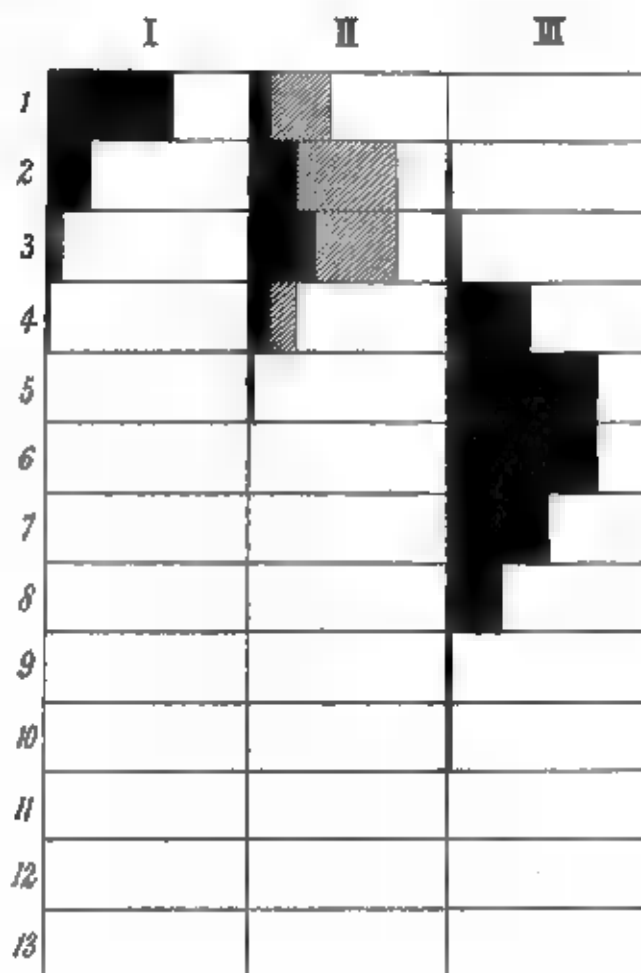


FIG. 3.

## EXPLORATION IN ASIA MINOR DURING 1898: FIRST REPORT.

BY J. G. C. ANDERSON.

A SCHEME of exploration in the central and eastern parts of Asia Minor was inaugurated last year by a series of journeys in Phrygia, the main results of which have been published in the *Journal of Hellenic Studies* (for 1897 and 1898). During the present season I had the good fortune to be accompanied by Mr. J. W. Crowfoot, to whom the opportunity was afforded by the liberality of the supporters of the Asia Minor Exploration Fund, and our energies were devoted chiefly to the exploration of Galatia, a country which has received but scant attention from archaeological or other travellers. But on our way thither, we did a piece of preliminary work in the shape of re-examining two difficult inscriptions which I had copied last year and visiting an unknown corner of Phrygia on the north of Mt. Dindymos (Murad Dagħ). In the following paper we propose to give a full account of this preliminary excursion, and a brief sketch of our work in Galatia which will indicate in detail the routes we followed, and so impart a good deal of information that will be of use to future travellers, but cannot be conveniently repeated in our detailed discussion of the district.

### PART I.

#### § 1.—*In the Plain of Afon Kara Hissar.*

Towards the middle of May (after a fruitless attempt to obtain official permits from the Turkish Government<sup>1</sup>) we left Smyrna and travelled by the Ottoman Railway to Dinër (APAMEIA). There we provided ourselves with servants and horses, and set out along the road leading to Tchat in

<sup>1</sup> We are glad, however, to be able to say that by walking warily and using all tact, and especially by the assistance of H.B.M. Consul at Angora (Mr. H. S. Shipley), we met with uniform courtesy from the local governors. Perhaps also we owed something to the political mood of the Turks, which is very variable; but a great deal always depends on the temper of the Vali Pasha and his individual subordinates in the provinces.



order to examine the two inscriptions for the sake of which we had made this long circuit.<sup>1</sup> This done, we made direct for Afion Kara Hissar (Akroēnos). All this country has been so frequently traversed by archaeologists that we felt but a languid interest in it, and our chief thought was of the shortest possible route to our destination. We therefore cut across the apex of the triangular ridge of hills which separates Karamyk Ova from the great plain that stretches in front of Tchai and Kara Hissar, and descended beside a Devrent (guard-house) on the old post-road from Constantinople to Konia, ■ short distance south of the hot springs (*Idja*). It was now late in the afternoon and, as it was impossible to reach Kara Hissar that evening, we decided to pass the night at Böyük Tchobanlar, a village on the north side of the sluggish Akkar Tchai (Kaystros).<sup>2</sup> To this circumstance we owe a most welcome and important discovery, which proves in a striking way how little any traveller or any number of successive travellers can claim to have exhausted the possibilities of a district and how much of his success the explorer often owes to chance.

The path to Tchobanlar diverges from the *chaussée* almost opposite to the village Kumral<sup>3</sup> and, passing near a *Tepe* indicated on the large-scale maps, crosses the Akkar Tchai by a stone bridge of several arches. Standing loosely on the parapet of this bridge we found a marble block with the following inscription:

///ΑΘ///  
 //ΟΝΓΗΣ//  
 ■■■ΔΕΣΠ//  
 ΑΥΤ/ΚΑΙΣΑ//  
 ΜΑΡΙ-ΑΥΡΕΛ//  
 ΣΕΒ:ΑΝΤΩΝΕΙ//  
 ΟΔΗΜΟΣΕΥΛΑ//  
 ΠΑΣΑΝΠΡΟΝΟ//  
 ΚΑΙΕΠΙΜΕΛΙΑ//  
 ΠΟΗΣΑΜΕΝ//  
 ΧΡΗΣΤΟΥΑΠΕΛ//  
 ΤΑΒΛΑΡΙΟΥ

'Αγ]αθ[ῆ Τύχη.  
 Τ]όν γῆς [καὶ θαλάσ-  
 σ]ης δεσπ[ότην  
 Αὐτ(οκράτορα) Καίσα[ρα  
 5 Μάρκ(ου) Αὐρ(ήλιου) Σεβ(αστὸν)  
 Σεβ(αστοῦ) 'Αντωνε[ίου υἱὸν  
 ὁ δῆμος Εὐλα[νδρέων,  
 πᾶσαν πρόνοιαν  
 καὶ ἐπιμέλ[ιαν  
 10 ποιησαμέν[ου  
 Χρήστου 'Απελ[λᾶ  
 ταβλαρίου.

<sup>1</sup> They are published in *J.H.S.* 1898, Pt. ii, p. 342 ff.

<sup>2</sup> Even in the recent map published by Major von Diest in Petermann's *Mittheilungen, Ergänzungsheft*, No. 125, this village is still placed on the south of the river. ■ is strange that such a mistake should be made when the survey of the *Chemin de fer Ottoman d'Anatolie* was used by the compiler of the map. (Probably the survey is not very careful.)

<sup>3</sup> So named on Von Diest's map.

We at once recognised in l. 7 the name of the bishopric EULANDRA, which was represented at the Council of Chalcedon (451 A.D.). The form of the name is quite clear from the signatures of the bishop, Μείρος Εὐλάνδρων,<sup>1</sup> *Mirus Eulandrensis*,<sup>2</sup> Μίρος ἐπίσκ. τῆς κατὰ Εὐλάνδραν ἡγίας τοῦ Θεοῦ ἐκκλησίας.<sup>3</sup> In one entry he is given as *Miros Bilandensis* in the province Phrygia Salutaris,<sup>4</sup> and as the name is not found in the *Notitiae* and was otherwise unknown, it was supposed by Prof. Ramsay to be a corruption of *Beudensis*,<sup>5</sup> a suggestion which he afterwards gave up for [*Si*]bidandensis.<sup>6</sup> The reason for its disappearance is now patent. The present position of the stone and the fact that its erection was superintended by a *tabularius*<sup>7</sup> show that Eulandra was the earlier name of the *Θεῖα κώμη* (i.e. *vicus Caesaris*) which from the middle of the sixth century onwards appears under the name of Augustopolis (cf. *Hist. Geog.* pp. 178, 143).

So even yet the last word has not been said on the march of Manlius! Our inscription renders untenable the view of Dr. Körte that the older name of Augustopolis was Anaboura, the second station after Synnada on Manlius' route (*Athen. Mitth.* 1897, p. 7). Anaboura must be sought elsewhere, and in the present state of the evidence M. Radet's suggestion to place it at Mukhall seems the best. There are remains there, and it is quite possible that the modern name, which perpetuates an old religious fact, the worship of St. Michael, points to a local cult and is not directly drawn from Prymnessos (where the worship of the Saint is attested by an inscription, *CB.* II. no. 678).

## § 2.—An Ancient Cemetery in the Tembrogios Valley.

On our arrival at Kara Hissar, we were told that many stones were being dug up by the Circassians of Ay-kürük (Tcherkes keui) a village about an hour north-west of Altyn Tash, on the post-road to Kutāya (Kotiaion), which I had visited in 1897; and we therefore made a circuit by the

<sup>1</sup> Mansi, *Sacr. concil. nova coll.* vi. pp. 57, 94, 1085; vii. pp. 41, 158.

<sup>2</sup> *Op. cit.* vi. p. 1172; vii. p. 125.

<sup>3</sup> *Op. cit.* vii. p. 437.

<sup>4</sup> vii. p. 407.

<sup>5</sup> *Hist. Greg.* p. 143, No. 75; *J.H.S.* 1887, p. 492.

<sup>6</sup> *CB.* ii. p. 753. I use the abbreviation *CB* to denote Prof. Ramsay's work, *The Cities and Bishoprics of Phrygia* (Oxford, 1895-7).

<sup>7</sup> On the office of *tabularius* (or accountant) which existed side by side with that of *dispensator* in the various bureaux for the administration of the Imperial *patrimonium* (*res privata*), compare M. Roslowzew in *Römische Mittheil.* 1898, p. 111 ff.

village on our way to Murad Dagħ. We found that the peasants, in searching for stones to build a new mosque, had lighted on an ancient cemetery and were turning up a quantity of inscriptions. We copied all that were uncovered and left the villagers still busily engaged in their excavations. They will be published (together with those which I copied last year in the Praipennisæis district) in the third volume of Prof. Ramsay's *Cities and Bishoprics of Phrygia*, and we need only indicate here the facts which they establish. In general they confirm the views put forward by Prof. Ramsay with subtle historical insight in regard to the early history and diffusion of Christianity. They supply definite proof of the Christian character of the curious formula against violation of the tomb,  $\sigma\upsilon\ \mu\eta\ \alpha\delta\iota\kappa\eta\sigma\alpha\iota\varsigma\ \tau\omicron\nu\ \theta\epsilon\omicron\nu$ , which frequently occurs on the tombstones of this valley, irregularly engraved in odd corners, and which Prof. Ramsay rightly regarded as in all probability a Christian expression, though "it is neither so obviously Christian as the second formula [ $\delta\acute{\omega}\sigma\alpha\iota\ \theta\epsilon\omega\ \lambda\acute{o}\gamma\omicron\nu$ ] nor capable of being certainly demonstrated by its varieties and accompaniments to be Christian, like the first" [ $\epsilon\sigma\tau\alpha\iota\ \alpha\upsilon\tau\omega\ \pi\rho\acute{o}\varsigma\ \tau\omicron\nu\ \theta\epsilon\omicron\nu$ ].<sup>1</sup> By thus providing us with another criterion of Christian epitaphs, they serve to strengthen the evidence which goes to prove that this district was one of the earliest to be thoroughly Christianized; and they supply fresh examples of the peculiar type of Christianity which prevailed here and differed from the ordinary attitude of the Phrygian Christians during the first three centuries in its open<sup>2</sup> profession of the new religion and its bold proclamation on the tombstone that the monument is erected by "Christians to Christians."

### § 3.—*The Country between Murad Dagħ and Aizanoi.*

The triangular corner of hill-country between Abia (Apia), Murad Dagħ (M. Dindymos), and Tchavdir Hissar (Aizanoi) has been curiously overlooked by travellers and is consequently almost a blank on the maps. We shall therefore describe it with some detail.<sup>3</sup> The only road by which

<sup>1</sup> *CB.* ii. p. 499.

<sup>2</sup> This cemetery stands by the side of the great road from East Phrygia to Koliaton and the coast.

<sup>3</sup> The higher slopes of Murad Dagħ, along which passes the direct road from Kara Hissar to Gediz (Kadni), were explored by W. von Dieck in 1886 (see Petermann's *Mittheil.*, *Ergänzungsheft*, No. 94); and we did not visit this district again.

wheeled traffic can enter this district from the Tembrogios valley passes the village Girei Tchak-keui and follows the course of a stream which comes down from Murad Dag and flows through the village to join the Tembrogios (Porsuk Su). Immediately above the village there is a little cultivated land, but presently we enter the hills and the valley of the stream becomes a narrow glen with barren, rocky sides. Up on the hills ten minutes to the right (west) of the road (45 minutes from Tchak-keui) lies the village Bazirgianli, and a little further up on the east is a village



SKETCH MAP OF THE COUNTRY BETWEEN MURAD DAGH AND AIZANOI.

Yaghdjilar. The road then runs along the stream, passing several mills, for nearly two hours, when the valley widens, the hills become lower and are covered with low shrubs, while other small streams come down from both sides to join the first, and presently the *dere* opens out into a small *ova* containing the villages Ören-keui (400 ft. above Tchak-keui and 3823 ft. above sea-level)<sup>1</sup> and Tokur. Ören-keui marks the site of a

<sup>1</sup> The altitudes in this district are reckoned by aneroid, which we compared at Tehigurlier with the altitude assigned by the Railway survey. They are not likely, therefore, to be far wrong.

Roman or Byzantine village; there are a few remains (including two or three inscriptions), and the villagers told us they had dug up pottery and old stones beside the village. In the fountain, which is entirely built of ancient blocks, there is a *stele* with Byzantine mouldings and the relief of a deer feeding, while on the upper margin runs the much worn legend,

1. + Ὑπὲρ εὐχῆς Τροφίμο[υ] Ψόλωνος καὶ τῆς συν[β]ίου αὐτοῦ  
Εὐδοξία[s].

For the name Ψόλων, *C.I.G.* IV., 8458. Deer are still plentiful on the higher slopes of Murad Dagh.

2. Stone shaped like a capital, with the legend

#### ΟΙΤΗΝΑΝΑΠΟΙ

Underneath there are two bands of ornament, each representing two mares facing (with the addition, in the upper panel, of sucking foals).

3. A fragment

. . . τῆς συνβίου [αὐτοῦ] . . .

The *ova* in which this village is situated is reckoned part of Girei Ova and goes by the same name. On south and west it is bounded by the hills, on the east by a level plateau, at whose northern edge lies the village Arslanlar. This plateau sinks again (on its eastern side) into another small *ova*, of about the same general level as the other, well-watered and extremely fertile; ■ contains two villages, Ishekler on the south edge (3923 ft.), and Alandjik on the opposite side, neither of which shows any signs of antiquity. From Ishekler a road turns south through another narrow, but rich valley watered by a stream from the southern slopes of the mountain, and gradually widening in a south-west direction towards Seraidjik (4223 ft.), which is reached in an hour and a quarter. Here there are so many columns and other worked stones of the Byzantine period that we must regard it as another ancient site; but no evidence was found to tell us anything about it. In order to return to the plain about Örenkeui, we ascended a high pass in a north-west direction, reaching the summit (550 ft. above Seraidjik) in half an hour, and then descended for about an hour to Tokur, a well-watered village south-west of Örenkeui. The country around is very pretty; the slopes of the hills

(especially towards the south) are well-wooded chiefly with pine trees, and consequently the villages are built of unsawn logs instead of the usual mud or small stones, and roofed with planks. On the undulating hill-slopes on the west side there are two villages, Tawa, one hour from Tokur (towards the north, 4073 ft.) and Tchanaldik, more than half an hour north-west of Tawa. At the former village there are several Byzantine columns in the cemetery and a capital ornamented with two bunches of grapes coming out of a vase, as well as a few old stones built into the houses; these have probably been carried. From here we followed a horsepath<sup>1</sup> over the *col* on the south-west (500 ft. above Tawa) and descended through thick woods to the valley of a limpid stream (a tributary of the Rhyndakos), down which runs the road to Yagmurlar (2½ hours). Leaving Yagmurlar we followed the course of the stream for some distance, passing in half an hour a small village Yeniler, and then struck across the hilly country in a northerly direction to Tchavdir Hissar (3323 ft.) the site of AIZANOL. The object of our visit to Aizanol was to search for the holy cave STEUNOS, sacred to Kybele, whose existence is known from two passages of Pausanias, in which he tells us that "the Phrygians who dwell by the river Penkalas, and who originally came to this district from Azania in Arcadia, point out a cave called Steunos, of circular form and of a goodly height. It is sacred to the Mother [of the gods], of whom a statue has been made";<sup>2</sup> and again, "they say that the people who dwell about the cave in Phrygia called Steunos and the river Penkalas are a colony from Azania."<sup>3</sup> These notices acquire fresh interest from an inscription found at Gediz (Kadoi) by the late Dr. Buresch in 1895,<sup>4</sup> *Δὲ καὶ Μητρὶ θεῶν Στευνήσῃ Ἀρτεμίδωρος Δημητρίου Αἰζανιότης ἐπέδωκε κτίσας ἐκ τῶν ἰδίων ἀνάθηκεν*.

Many years ago Prof. Ramsay heard of a cave near Aizanoi called *Kessik Magara*, i.e. "the cut cave," a name which promised well but might merely denote a rock-cut tomb or chamber. But as he only received this

<sup>1</sup> There is a longer road, to S. of this path, just practicable for an *araba*.

<sup>2</sup> x. 32, 3.

<sup>3</sup> viii. 4, 3. The older and more strictly correct form of the name of the Phrygian city was doubtless, as Buresch remarks, *Aizanol*, which is used by Strabo, Ptolemy, Hieronymus and Steph. Byz., Hierocles, and the episcopal lists. The explanation of the name quoted by Steph. (see *Hitt. Geog.* p. 147) looks like a piece of popular etymology, and the story doubtless originated with the priest-kings who in early times ruled the city and perhaps bore the name Euphorbidai, like the *Ἀρκεδῆες* at Halicarnassus, etc.

<sup>4</sup> *Ann. Lydien*, p. 159.

information when he was well on his way eastwards, he was unable to examine it; the name, however, was indicated in accordance with his report on Kiepert's map, in the hope of attracting the attention of future travellers. An examination of Kessik Magara showed that here beyond all doubt was the sanctuary of Kybele. About twenty minutes south-west of Aizanoi, high up on the ridge that forms the left bank of that arm of



DISTANT VIEW OF THE STEUNOS CAVE.

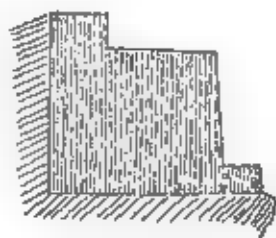
the Rhyndakos on which the city lay—and which was therefore called the Penkalas<sup>1</sup>—there is a large cave with no trace of artificial cutting, running underneath a heavy mass of overhanging rock, circular in form and of a fair height (as Pausanias has it). There are two entrances separated by the natural rock, on the outside of which there are six niches for votive

<sup>1</sup> The stream which appears in the photograph is merely a mill-stream.

reliefs, and a larger one below which is so shaped as to contain two figures, one of full size—evidently the statue of Kybele—and the other quite small, on the left of the former; while underneath (at the bottom of the rock) there is a hewn stone with two oblong socket-holes for the reception of the cultus figures. High up on the rock, near the main entrance (which is on the spectator's right), and commanding a view of the city and the plain below, is carved the throne of the goddess, which reminds us of the 'Throne of Pelops' on Mt. Sipylus or the double throne of Zeus and Hekate on the acropolis of Chalke, an island off the west coast of Rhodes, which is more nearly similar in form.<sup>1</sup>

On the top of the ridge, above the cave, are two circular buildings (or enclosures) a short distance apart, built of huge squared blocks, with a projecting course above forming a coping. The better preserved southern one measures in interior diameter 3.80 m.; the blocks are 1.20 m. high, 0.70 m. thick, and of a varying breadth. In the wall are three doorways, 1.20 m. x 0.50 m.<sup>2</sup> Several stones now fallen over the cliff belonged originally to these buildings. The inside of both enclosures is now partially filled up with earth; but excavation would be very easy and would probably repay the trouble. Were they *tumuli* or places for sacrifice? Without excavation it is hardly possible to determine their purpose.

From Aizanoi we proceeded to visit the hilly country through which the road to Kutāya (Kotiaion) passes, after leaving the plain of Tchavdir Hissar; but here we found no remains of antiquity save one inscription at the *tchiftlik* Bazardjik which was copied long ago (*C.I.G.* 3857) and has suffered in the meantime, and a few others at Ortadje and Yaliniz Serai in the north-west extremity of Girex Ova.



SECTION OF THE THRONE  
(ROUGHLY DRAWN BY EYE).

<sup>1</sup> *Arch.-epigr. Mitth. aus Österreich.* xviii. (1895) p. 3. The rock-'altars' (as they have generally been called) on the acropolis of the Midas-city seem to me quite different, and I cannot agree with Dr. Körte's views about them (*Es sind Throne für die unsichtbare Gottheit, Athen. Mitth.* 1898, p. 119). Whether the altar grew out of the throne is a different question.

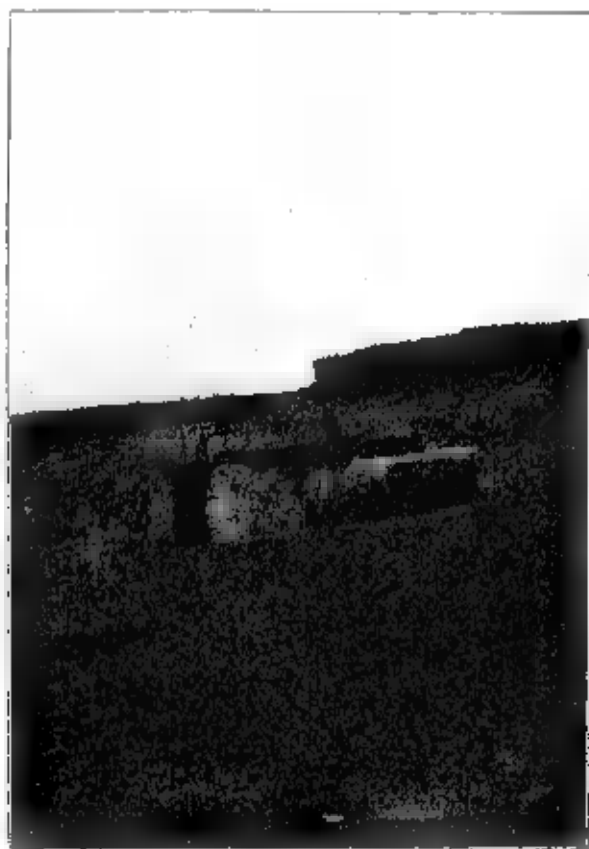
<sup>2</sup> The other has no doorway (if my memory serves me rightly)



## PART II.

§ 1.—*The Country S.E. and E. of Amorion.*

Returning to Kara Hissar, we set out to begin our work in Galatia. Our plan was to commence with the unknown region lying on the north of the long ridge of hills which runs down from Emir Dagħ and forms the



THE SOUTHERN CIRCULAR BUILDING ABOVE THE CAVE.

northern boundary of Phrygia Paroreios. This district is practically a complete blank in the maps and many parts of it have never been trodden by any traveller, so that we take the chance of describing our routes here

in detail. The easiest way of reaching the district is to take the road from Ak Sheher (PHILOMELION) along the east side of the Lake (passing west of the village Apsarc), whence a direct and easy path crosses the ridge and descends by a *dere* into the plain of Durgut. This was the route we followed.<sup>1</sup> When the traveller has passed the summit of the ridge and begun the descent, an extensive view opens out before him. His eye wanders over a vast plain which stretches away towards the distant peak of Gunusu Dagħ and the rolling Harmane<sup>2</sup> on the north, and up to the prominent ridge of Ala Dagħ on the east (reckoned nine hours from the edge of the plain beneath); while on the west the view is closed in by the neighbouring mass of Bayad Kolu (*kol* = "arm") which screens from sight the plain of Tcheltik and Amorion. In the dim light of evening it looks a promising country, but when the traveller begins to wander over it, he meets with an unpleasant surprise. He finds it sparsely inhabited: the villages are few and far between: the soil is dry, sandy and bare, and the patches of cultivated land which he sees here and there yield but a poor increase. Then he realises that he is already on the edge of that great barren, treeless waste which fills the centre of the peninsula and has from all time merited the name of ANYLOS. The character of this vast tract of country is very inadequately described by such vague expressions as "Salt Desert," "Great Salt Plains," and so forth. Few parts of it are absolutely desert, for villages are to be found all over it at intervals, where any fair water supply is available; and except on the south and south-east the proportion of level plain is by no means above the average. On the contrary, the landscape is ever varied by gently undulating ground, rolling country, hill, and mountain; but all alas! are equally bare, equally dreary and forbidding. The conditions of travel are not easy or pleasant here, and the explorer has always shirked it.

Descending from the hills we entered the Ova of Durgut, narrowed on the south by the hills but widening out towards the north-east into a

<sup>1</sup> The west side of the Lake is too marshy for a road to pass over it.

Route from Ak Sheher to Durgut Ova:—Meiles kenî (1½ h.), Kurd kenî (½ h.), Tuzlukjî (1 h. 55 m.; before this village the road to Firibeyli diverges), foot of the hills (1 h. 45 m.), summit (1 h. 15 m.), foot of Bagirsak dere (1½ h.), Kharsanlu (ca. 1 h.). The time-distances added after a place are always reckoned from the previous station; square brackets denote a *détour* and return to previous station. "H." signifies hour, and "m." minutes. Ak Sheher Lake is made too large in recent maps; our route did not pass near it.

<sup>2</sup> Harmane (*i.e.* Waste) is the name of the whole country S. and S.W. of Angora (ANKARA) between the Sangarios and the vicinity of the Halys.

limitless stretch of almost uninhabited desert. At Khursunlu we found a boundary stone marking the limits of two towns or villages MISKAMOS and HAKRA (or ARRA), and we afterwards found two old sites in the plain: one beside an old fortress twenty minutes from Khursunlu and a quarter of an hour from Harranlar, a *yaila* of Durgut, and the other at the last-named village where numerous remains and inscriptions attest an ancient town. It seems probable that the village Harran-lar retains the ancient name, and in that case the town at Durgut will be Miskamos. Our route thence lay along the base of the Durgut ridge which runs north-north-west for an hour and then turns to west: here we entered a small plain called Eshme Ova, bounded on the north by Kurshunlu Dag and Bayad Kolu, and in half an hour more reached the village Geuz Ören. Here was an ancient town called SELMEA, according to the evidence of two votive inscriptions, one of which reads:—

Ἀδρ. Πατρὶς Γάλου καὶ Γάιος Πατρὶς ὁ υἱὸς αὐτοῦ ὑπὲρ [ρ τ]ῆς ἑαυτῶν  
σω[τηρι]ας Μηνὶ Σελευην[ῶ] ἐνέχην.

At Yunak, a Kurdish village on the slopes of Bayad Kolu, just above the road from Ak Sheher by Ak Göl to Angora, we had our first experience of the inconvenience caused to the traveller by the Kurdish custom of deserting the village in summer and removing households, flocks, and herds to some quarter (*yaila*) where better pasturage and a cooler atmosphere may be found. The *oda* (guest-room) was shut up, and nobody was to be found in the village but some women of the poorer class not possessed of enough of this world's goods to go with the others to the *yaila*. It was an amusing scene when our good *saptich*, a friend of last year, a humourist, and altogether a most servicable man, mounted on a wall and announced to the throng of women a list of our necessities in the simplest Turkish he could command<sup>1</sup>: when thereafter the circle gradually began to form around us, with children in arms or distaff in hand, and to examine us and our dress and effects with the curiosity and envy of simplicity, while our servants exerted themselves—in vain!—to effect a reasonable bargain for the horses' fodder.

Leaving Yunak, we passed over the higher slopes of Bayad Kolu,

<sup>1</sup> The men know Turkish, but Kurdish is the language of domestic life. So the ancient Galatians spoke Celtic in their own homes, using Greek only as a medium of intercourse with the outside world, until Christianity enforced its language.

reaching an altitude of 800 ft. above the village, and came down beside Upper Agz<sup>1</sup> Atchik, "Open-mouth," an appropriate name for a village lying near the mouth of a narrow *boghas* through which passes one of the roads from Ak Sheher to Piribeyli. Near the other end of this pass lies the lower village, at the head of an *ova* crossed by the roads from Ak Sheher. From this point we turned northwards again through a glen with low hills on either side, watered by a stream which flows through Ashagha Piribeyli towards the Sangarios.<sup>2</sup> Ashagha Piribeyli is an extensive ancient site lying under the western corner of the long ridge Serfi Ören-i,<sup>3</sup> which interposes a barrier between the lower slopes of Bayad Kolu and the plain below. It is unfortunate that none of the numerous inscriptions give the name. Prof. Ramsay has proposed to identify it with PISSIA (*Hist. Geog.* p. 233), but certainty is as yet unattainable. Our route thence passed along the lower slopes of Bayad Kolu and down to Tcheltik. At Tcheltik there are no remains to be seen except those which have been used up in building and, recently, in repairing the elaborate domed mosque; but an hour and a half to the north there is an important site with a necropolis of enormous extent further west (50 m. north of the village). This is no doubt one of the towns mentioned by Livy on the march of Manlius (? ALVATTI), and is perhaps to be identified with the Tolistobogian town TOLISTOKHORA.

We now proceeded to visit the country round Ak Göl, a long narrow lake, overgrown with tall reeds, and stretching for several miles in a southerly and easterly direction.<sup>4</sup> Fifty minutes south-south-west of Kutchuk Hassan there is a small site called Serfi Öreni on the lower slope of the long ridge to which it gives its name, whence is said to have come a quaint inscription recording a dedication *Μητρὶ Τετρ[απο]σώπῳ ὑπὲρ ἀνθρώπων καὶ τετραπόδων*.

<sup>1</sup> Italicised *g* is used to denote that the letter is softened down in pronunciation so as to become almost silent.

<sup>2</sup> Details of route from Durgut Ova to Piribeyli:—[From Khursanlu to] Kale (20 m.), Harmanlar (15 m.), Durgut (1 h. 20 m.), Cieuz Ören (2 h.), Kizil Kuyu Yaila (deserted village at W. extremity of *Ova*), Yunak (2 h.), Agz Atchik Yokarı (1 h. 45 m.), Agz Atchik Ashagha (55 m.), Ören keui (1 h. 15 m., N.W.), Ashagha Piribeyli (1½ h.).

<sup>3</sup> So called from a small *Aurantiacæ* on its slopes further East (*infra*).

<sup>4</sup> Route from Piribeyli to Ak Göl:—By Yokarı Piribeyli to Kurduşan: thence Tcheltik (3 h.), Kutchuk Hassan (1 h. 25 m.), Oda-lashi (50 m.), over undulating country to Hadji Fakir (1 h. 35 m.); thence through villages near E. end of Ak Göl: İmam Oğlu (20 m.), Serai k. (10 m.), and across the lake to Sakushagh (1 h. 5 m.).

§ 2.—*From Ak Giöl to Angora.*

We were now compelled by circumstances—which so frequently intervene to interrupt the natural course of the traveller's exploration—to take a more or less direct route to Angöra. Our Consul there, who was on the eve of leaving for a holiday, had suggested to us that it would be wise to try and reach Angora before his departure and be introduced by him to the Vali Pasha, who would (he hoped) furnish us with letters for the governors of the districts we were likely to visit this year. We agreed with his view, and as the time was now short, we had to curtail our original scheme and not wander far afield. Leaving Ak Giöl, therefore, we entered the rolling country of the Hatmane and travelled north-east to Yuzuk-bashi, a picturesque village lying in a round depression at the head of a *dere* (whence its name "Ring-head") and well-watered by copious springs which form a marsh at the lower end of the village and issue in a stream which flows away to join the Sangarios, ten minutes or so north of Tchakmak.<sup>1</sup> Our route thence followed the usual road to Turk Tahajir and Kabak, but instead of taking the direct road to Angora *via* Ilidja<sup>2</sup> and Hammam we diverged eastwards up the valley of a small affluent of the Sangarios and over the arid, treeless wastes of an undulating plateau to Katrandji Inler, "Caves of Katrandji," a name derived from the numerous rock-cut tombs and chambers which line both banks of the stream below the village. There are many other remains of ancient life in and near the village (including a fragmentary inscription with some symbols that may possibly be "Hittite," copied by Prof. Ramsay in 1883, but not seen by us), which have come from a *trümmerfeld*, fifty-five minutes to the south-east. Thence we followed the course of the Ilidja Su past Kizil Hissar (or Kale), the Byzantine fortress ΑΠΗΡΑΖΕΙΑ (*Hist. Geog.* pp. 227, 218), to Yamak at the head of the valley, whence we crossed Ardidj Dagħ to Hammam by a

<sup>1</sup> At Gök Benar W.S.W. rises another stream which passes Renkoglū [derived from routes of Prof. Ramsay] and pours a large volume of water into the Sangarios just below (North of) Elles Pasha, 3 hrs. from Tchelik. We found it impossible to find this river an hour above its mouth (July 28).

<sup>2</sup> The road turns up the valley of the Ilidja Su, which comes down from the east of Hammam and falls into the Sangarios about  $\frac{1}{4}$  hour below Kabak.

road practicable for wheeled traffic, which reaches an altitude of 900 feet above Yamak.<sup>1</sup>

Yapan Hammam is an entirely modern town. It was made a *kaim-makanlık* about seventeen years ago—hence it is called *Merkez*, i.e. the governmental centre, of the Hatmanç—, and it owes its importance largely to its healthy situation and its hot springs, in old time the *Therma* of the Myrikenoi (*Hist. Geog.* p. 226). The city MYRIKA, however, probably lay beside Kadi keui, about three miles down in the fertile valley, where there are numerous ruins belonging to the Christian period. Our route thence to Angora does not require special description. We paid a visit to Giaour Kalé-si, the splendid prehistoric fortress with "Hittite" sculptures (twenty minutes north-west of Dere keui), discovered by M. Perrot in 1861, and found another *Kalé*, doubtless a sort of outpost of Giaour Kalé-si, six minutes from Dere keui on the opposite side of the stream, commanding an alternative road to Angora. The road thence leads past Oyadja and over a plateau, slightly sloping towards the south and bounded by a high ridge on the east, whence the traveller gets his first view of the blue waters of Mohan Giöl and presently descends to Topaklı, a village lying down in a hollow with rolling ground beyond. Topaklı is the site of an ancient town ANDRONA, according to the evidence of a votive inscription

Μηνὶ Ἀνδρῶν ἡμεῖς Τρόπος καὶ Βέλλα εὐχόμεν.

Our only other important discovery on this road was made at Yalandjak, a village under the brow of the hills looking down on Angora, whence the traveller gets a fine view of the city with its gleaming minarets and its buttressed walls crowning the acropolis hill. Built into the fountain of this village is a large trachyte (?) *stèle* with a lion sculptured in low relief

<sup>1</sup> Route from Sakushagh to Angora:—Yuzuk-bashi (2 h. 5 m.), Siman (1 h. 20 m.), Toprak Bunar on edge of marshy valley running towards Sakaria (10 m.), Turk Tahajir at foot of Sakaria cañon (fully 2 h.), opposite Kalak (45 m.), turn E. up a *dere* for  $\frac{1}{2}$  h. and over plateau down to Katrandji Inler in about 3½ hours more, thence Kizil Ihsar (1½ h.), [Tabur-oglu (½ h. to left)], opposite Kiraz-oglu on right (1 h. 30 m.), opposite Baghtchejik lying 20 m. up hill side on left (42 m.), go N.N.E. in direction of 30° for 1 h. 12 m., thence due E. for 25 m., whence Katrandji keui reads 150° (24 m.). Thence to Yamak (reading 330°) on opposite side of the valley (1 h. 10 m.), and over hills to Hammam (ca. 2½ h.), Kadi keui (50 m.), Erif (1 h.), Hüyük (55 m.), Gernim (20 m.), Sari-giöl (ca. 1 h.), Mandra keui (29 m.), Giaour Kalesi (37 m.), Dere keui (20 m.), Oyadja (40 m.), Topaklı (1 h. 40 m.), Hadji Muradlı ½ h. to left of road (57 m.), opposite Yawrudjik [Perrot's "Glaurechik"] (28 m.), opposite Deli Hümmetli which lies ca. 1 h. up hills on left (17 m.), junction of alternative road by Giaour Kalesi with ours (48 m.), Hadjilar (27 m.), brow of hills on south of Angora (1 h. 15 m.), thence by Yalandjak, Balghat, etc. to Angora.

(broken at the head), exactly similar in size and technique to that found by M. Perrot at Kalaba on the opposite side of the valley and described in his *Exploration de la Galatie* (pp. 226, 320, Pl. 32). A third replica, excellently preserved, was afterwards found by us at Amaksiz, a ruined village by the railway, a few hours down the valley of the Angora river (Engüri Su). These *stelai* have probably been carried from Ancyra.

### § 3.—*The line of the Pilgrims' Route to Juliopolis.*

At Angora we came once more into touch with civilisation, and the kindly hospitality of our genial Consul Mr. H. S. Shipley, made our visit a very pleasant one. Through his good offices we were furnished with letters of recommendation from the Vali Pasha to the district governors; and, thus fortified, we set out on a five weeks' expedition through the country to the west and south-west. The country west of Angora is now well known; and its character may be readily understood from the accompanying map, so that the reader may be spared the tedium of wading through minute details about our routes there.

Our first task was to determine the line of the Pilgrims' Route as far as Juliopolis and endeavour to fix the situation of the towns on it. Historically, this is one of the most interesting roads in Asia Minor; but, archaeologically, it is one of the most thankless that the explorer can find. The sites to be determined are the following: *Conaxis palus*, *Prasmon*, *Mnizos* (bishopric), *Petobriga*, *Lagania-Anastasiopolis* (bish.), *Sykeon* (on the *Siberis*) and *Juliopolis* (bish.). The first two are omitted by the Antonine Itinerary and in their place is given a town *Manegordos*, twenty-four miles from Angora and twenty-eight from Mnizos, which obviously cannot be on this road (for the distance is twice too great), but in all probability is to be sought in the plain called Murtad Ova ("Apostate plain"), drained by a river which joins the Engüri Su below Istanos.<sup>1</sup> We therefore began by examining the triangle of hill-country between Angora and this plain, then explored the plain itself, and proceeded westwards along the only possible line for the Pilgrims' Route (viz. by Ayash

<sup>1</sup> In precisely the same way Bologasgos is given on the direct road from Angora to Tavium, whereas it is in Tchibuk Ova (Balikassat keui), north-east of Angora.

and the valley of the Ayash stream and the Ilkhan Tchai).<sup>1</sup> CENAXIS PALUS is to be identified with Kebir Giöl, a small lake dry in summer, lying about one and a quarter miles north-west of Emir Yaman (which is reckoned four hours from Angora). Beside the *palus* on the north side is a small old site, the *mutatio* of the Jerusalem Itinerary, and between this site and the lake runs the modern *chaussée*, following the line of the ancient road. At Emir Yaman we found a milestone of Hadrian erected by A. Larcus Macedo, but the number is obliterated. There are some remains at Meranos, which lies on the higher slopes of the hills that bound Murtad Ova on the east. Probably there was an ancient village there, and Meranos looks as if it were actually the ancient name. But the important sites are at Yassi Ören and Karalar, not much more than an hour apart. The remains at the former village are numerous, but late in character (see Mr. Crowfoot's paper in this number of the *Annual*); those now at Karalar are mostly squared blocks of trachyte(?), but a quarter of an hour to the north-west there are the ruins of a fine old fortress (*Assar*) which reminds us irresistibly of those in the Phrygian monument country. Now there are two names in this district waiting for a habitation,—Manegordos<sup>2</sup> and Crentius,<sup>3</sup> both given in *Itin. Anton.* as twenty-four MP from Angora, the latter being on the road to Krateia-Flavio-polis. Surely the fine old Phrygian name Manegordos belongs to the old fortified city at Karalar. Yet it is Karalar which is on the road to Krateia (Gerede). The solution doubtless is that the old city at Karalar had dwindled to a mere village, destroyed perhaps like Gordion by the Gauls, while the later city at Yassi Ören, a little off the road, was the important place in later times. The village Girindos or Kirindos, some distance to the south-west, *perhaps* retains the name Krentios (as suggested by Prof. Ramsay, *Hist. Geog.* p. 20); if so, its appropriation of the name must be explained by supposing that it is one of the oldest villages in the plain. It is not itself an old site. The inscription copied here by

<sup>1</sup> Route from Angora to Istanbul:—Evedik (1½ hr.), Yuva (1 hr.), Tehakirlar tehişlik (57 m.), Emir Yaman (1 hr.), Kebir Giöl (1½ mile), Serai k. (ca. 2 hrs.), by Teshrek (Circassian) to Meranos (ca. 3 miles), foot of *dere* (1 hr.), Aydın (40 m.), Mekhü (15 m.), Halkadli (10 m., across river), Yassi Ören (1 hr.), Sogutjak (30 m., N.W.), Karalar (1 hr.), Shimshik (3 miles), Emir Ghazi (9 m.), Bidik (37 m.), Girindos (50 m.), Mulk, Il-agut (*pronounced* Ilait), Akja Ören (ca. 20 m.), Istanbul (1½ hr.).

<sup>2</sup> *Hist. Geog.* p. 242

<sup>3</sup> *Ibid.* p. 20.



Mordtmann, *C.I.L.* III 282, has perished. We found also at Karalar a fragment of very early pottery.

The line followed by the Pilgrims' Route westwards from *Cenaxis palus* is quite clear. It passed along the lower end of the Murtad Ova, above the mouth of the gorge in which Istanos lies, and ascended the ridge called Ayash Bel by way of Irkek-su tchiftlik, where we found a milestone of Diocletian and Maximian, apparently in its original position by the side of a quaint cemetery belonging to an ancient town or village, which we would identify with PRASMON. The road descends again by the head waters of the stream that passes Ayash and clothes the ravine in which the town lies with a welcome band of verdure. Ayash was long ago identified by Kiepert with the bishopric MNIZOS, the next station on the route, and Perrot thinks he is right, for (amongst other reasons) a sufficiently large number of blocks which should go back to antiquity were to be seen in the walls of the houses; and, according to Tournesfort, ancient marbles were to be found there in his time. We came to a different conclusion; most of these squared blocks seemed to us to be of distinctly modern work: few at least could be certainly called ancient. Moreover, this position is irreconcilable with the distances given by the Jerusalem Itinerary; but we need not go into details here. Suffice it to say that, being dissatisfied, we proceeded to search up and down the toilsome hillsides for a more suitable site, and that we think we have found it twenty minutes or so below Tchagha keui,<sup>1</sup> a village north-west of Ayash, about an hour and thirty minutes distant from the *chaussée*, which follows the line of the ancient road as far as the *Deurent* (guard-house) on the Kirmir Tchai, a short distance below its junction with the Ilkhan stream. At Bairam keui we found another very massive milestone of Diocletian, which has been carried up from the valley.<sup>2</sup>

<sup>1</sup> The name sounded like Tchai or Tchel; but when I asked the people to pronounce it slowly, it seemed to be Tchagha.

<sup>2</sup> Route from Istanos to the R. Siberia:—Kaye (not Kaya) keui (ca. 1 h.), Irkek-su tchiftlik ( $\frac{1}{2}$  h.), over Ayash Bel, joining *chaussée* east of Bash Ayash (1 h. 8 m.), Ayash (57 m.), [Mr. Crowfoot went by the *chaussée* and visited Bash Ayash.], Kassaba (55 m.), Bairam (2 h.), Tizke (1 mile N.N.W.), back to Bairam, Ildja keui (1 h., W.); Mallal (2 h. 5 m., ca.  $\frac{3}{4}$  h. N. of Tizke), Ilkhan keui (2 h. S.W., on right bank of river which joins Ayash water; 1 h. from Ildja), Geunidje tchiftlik ( $1\frac{1}{2}$  h.), Tchagha (? Tchai) keui (1 h. 20 m.); Ak kaya (1 h.), Kale (*i.e.* Petobriga, 1 h. 20 m.), cross Kirmir Tchai and up left bank to Ada ören (1 h. 20 m.), Indje Fellit ( $\frac{1}{2}$  h. in air-line), Qyun Fellit (1 h.; N.W. of Ada ören), Kizil Segut ("red willow,"  $\frac{3}{4}$  h. S.W.), Bey-bazar (1 $\frac{3}{4}$  h.).

While it is unfortunate that there is no epigraphic evidence to settle beyond dispute the position of towns on this road, I do not think there can be any doubt as to the identification of PETORRIGA with a strong fortress overhanging the deep cañon of the Kirmir Tchaj, about a mile and a half above its junction with the Ilkhan water, and occupying a sort of isolated hill round which the river makes a sharp bend in the shape of an  $\Omega$ . *Briga* in Celtic means "hill" or "castle" and belongs to a widely-extended group of words *Bria*, *Berga* or *Perga*, *πύργος*, *burg*, etc.,<sup>1</sup> which easily come to denote "fortress" or "fortified town"; and *Peton*, which actually occurs in the *Life of St. Theodore* (Latin translation, p. 55, Πέων of the Greek text<sup>2</sup> being evidently a misprint), is clearly to be regarded as a shorter form of the name.

The next station LAGANIA (afterwards the bishopric Anastasiopolis) has sometimes been placed at Bey-bazâr, the chief town of the district at the present day, occupying a beautiful position on three hills at the mouth of a gorge filled with gardens and vineyards and watered by a tributary of the Kirmir Tchaj. But Bey-bazâr seems to be a Turkish foundation, and its position is of a characteristically Turkish type. There is an old *khan* in the town, but the only remains of an older date are the numerous rock-hewn chambers on both sides of the gorge, which were probably (as M. Perrot thinks) Troglodyte dwellings. It seems unlikely that the ancient road made the *détour* by Bey-bazâr; it probably kept along the valley of the Kirmir Tchaj, and the site of Lagania was perhaps at Mal Tepe ("Treasure hillock"), ten minutes south-east of Fazil Tchiftlik, beside which are the ruins of a village that used to be the *yalla* of Bey-bazâr. Here also there are numerous rock-chambers, and we picked up on the *tepe* a large fragment of Samian ware (*terra sigillata*).

The road hence turned towards north-west, coincided for some distance with the modern *chaussée*, and then turned south-west towards the junction of the River Siberis (Ala Dagħ Su) with the Sangarios. SYKEON, famous as the birthplace of St. Theodore, bishop of Anastasiopolis (Lagania) in

Back in Devrent on Kirmir Tchaj (time forgotten: 3 h. Perrot), along Kirmir Tchaj by *tchiftlik* I. (1 h. 20 m.), *tchiftlik* II. (20 m.), Bey-bazâr stream (1 h. 10 m.) to Fazil *tchiftlik*; Mal Tepe (to m.), Mukhalitch Keuprü (3 h. 15 m., very fast riding), down Sakaria to Yardibi *tchiftlik* (1 h.), Eski-sheher (=Sykeon) and Bridge on Ala Dagħ Su (=Siberis, 10 m.).

<sup>1</sup> Holder, *Sprachschatz*, s.v.; Ramsay, *C.B.* II, p. 382.

<sup>2</sup> The Greek original is published in Μνημεῖα Ἀγιοῦ Ὁγίστου ἐκ τῆς ἐκδόσεως ὑπὸ Θεοφίλου Ἰωάννου (BENETI, 1884).

the sixth century, was situated at the crossing of the Siberis, over which Justinian built the great bridge described by Procopios (*De aedif.* v. 4). It has hitherto been identified with Tchattr-khan on the modern carriage-road to Nalli-khan; but this is a mistake. The site, which is now called *Eski-sheher* ("ancient city"), lies on the left (east) bank of the river not far from its junction with the Sangarios, and beside it still stand the seven piers of Justinian's fine bridge, bound round with logs of wood as a buttress against the winter floods, and used to support the wooden bridge which carries the modern road over the river.

A little beyond the bridge, close to the village Sarilar, is a mound representing a very primitive site, whence a peasant lately dug up an idol of the well-known "Island Class," and a pot of the beak-spout type, of a brilliant red colour, with string-holes (presented to the Ashmolean Museum), along with a round green macehead and a piece of copper. These finds, together with the numerous fragments of pottery which we collected from various sites, furnish important and much-desired evidence as to the wide range of the early civilisation of the Aegæan lands and in particular prove that these inland parts were in communication with Cyprus and Egypt (*via* the Cilician Gates) in the most primitive times.

The road now follows the course of the Sangarios as far as Baluk keuprit (1 h. 50 m.) and, ascending the ridge on the right (north), passes over a slightly undulating plateau to JULIOPOLIS (ca. 3½ h.), the site of which was rightly identified in 1865 by M. Lejean with the ruins half an hour to the north of Enrem Sultan, on the right bank of a stream (the SKOPAS) which flows into the Sangarios a quarter of an hour below the village.<sup>1</sup>

#### § 4.—The district of Mukhalitch.

The district of mountainous country called Mukhalitchjik, bounded on north and east by the Sangarios and on south by the Tembrogios (Porsuk Su) and now placed under the *kaimmakaulik* Mukhalitch ("city of St. Michael"),<sup>2</sup> next claimed our attention. Starting from Baluk

<sup>1</sup> Route from Bridge on Siberis to Juliopolis:—Sarilar (under ¼ h.), Ak Yar *tchift.* (3 h.), small *çuk* (20 m.), Geni Bashi *tchift.* beside Baluk keuprit (3 h.), turn N.W. and W. to Aiman bashi (1 h. 58 m.), Enrem Sultan (22 m.), JULIOPOLIS (½ h.). Direct road from Juliopolis to Aiman bashi is 35 m. (travelled by agreement). From Aiman bashi we returned to Baluk keuprit.

<sup>2</sup> Called also Kuyudjak, but not a common parlance. It is a poor village and apparently not very old.

keuprü,<sup>1</sup> we ascended the ridge Arab Beli which rises to the height of 800 feet above the Sangarios and then traced the course of the Baluk (or Indje) Dere to the village Iki Kilisse ("Two Churches"), 1450 ft. above the channel of the Sakaria (2 hours 5 min.). This village, consisting of three *mahallas*, is the site of an ancient town, which fortunately is not nameless. Amongst the inscriptions which we found here, there is a *stèle* recording a dedication by a family of hereditary priests to Zeus of AKREINA (Διὶ Ἀκρεῖνης ἐὶν ἑστύῳ). Akreina is mentioned in the *Life of St. Theodore* as possessing an oratory of the Archangel.<sup>2</sup> The worship of St. Michael was widely spread all over this part of the country.<sup>3</sup>

At Tchardak (one hour south-west) there was another ancient village. Several massive and elaborately moulded tombstones still lie in their original position in the old cemetery; but only one inscription is exposed to view. While I visited Tchardak, Mr. Crowfoot made a *détour* by Bey keui where he copied two Latin inscriptions and rejoined me at Mukhalitch. Below Iki Kilisse and Tchardak stretches the long ridge of Kartal Dag, which reaches an altitude of 1,900 ft. above the former village and 625 ft. above Mukhalitch at the point where the Tchardak road crosses it. Mukhalitch lies on an upland between this ridge and another stretching from east to west on the south side of the town. On the south-east this ridge slopes down to the Tembrogios, a little cultivated and thinly populated waste; but on the south-west there is a long fertile valley, which, at the present day, forms part of an Imperial Estate, possibly a royal inheritance from ancient times.<sup>4</sup> Here there are numerous remains of ancient life. One of the old centres was called NARA according to two dedications, which

<sup>1</sup> Routes in Mukhalitch district:—From Baluk keuprü to Iki Kilisse (2 h. 5 m.) [whence we visited Onzu, on top of ridge just over the stream]; Tchardak (1 h., S.W.), Mukhalitch (2 h., S.S.E.). [Mr. Crowfoot went by Bey keui, etc.] Thence to Kaye (*şındırnak*, 1 h.), village ten minutes to right (57 m.), Geudje (18 m.), Kizil Büyüklü (or ? Beyikli, 43 m.), back to Geudje, whence Kara Geyikler (30 m.), Tut-agatch (30 m.), Doghan-oglu (40 m.), eastward again to Molajir keui (20 m.), Igde agatch yokarı (1½ h.) [ashghla (½ h.)], Geuktehe aıra (or ? Geuktehai) (over ½ h., but ca. 20 m. in air-line), *Yaila* (1 h. 15 m.), Varikdji (2 h. 40 m.). Hence I went to Sari keui and by rail to Angora, returning to Bitcher; while Mr. C. visited some villages in the hilly country E. and N.E. of Mukhalitch, rejoining me at Bitcher.

<sup>2</sup> Μνημεία Ἀρχαιολογικά, p. 434. The Latin translation in *Acta Sanctorum* wrongly gives it as Ambrena (*Hist. Geog.* p. 246).

<sup>3</sup> On 'Michael' in modern Turkish names, see *CB.* i. p. 31.

<sup>4</sup> For ancient royal estates still remaining as such in Byzantine and Turkish times, cf. *CB.* i. p. 10-11 etc.

we found at Mukhalitch (carried from Tut-agatch) and at Yarıkdjı, to Zed̄s Ναπηός. The town was situated near Tut-agatch.

§ 5.—By COLONIA GERMA to AMORION and back by the Sangarios to Angora.

The valley of the Porsuk Su from Igde Agatch to its junction with the Sangarios near GORNION<sup>1</sup> is mainly either marsh or waste. On the south it is bounded by a ridge of hills, high in the centre where the river makes a bend to the north (from Bitcher to below Sari keui) and gradually sinking on either side, especially on the east where they merge into the slightly undulating, waste table-land, which fills the corner between the two rivers. The southern slopes of this ridge roll down to a long valley (running roughly westwards from Mülk), which rises more sharply up to the slopes of Gurusu Dagħ. Along this valley ran the Roman road from Dorylaon [Eski Sheher] to Angora, passing by Mülk (where Hamilton copied a milestone of Titus) and crossing the Sangarios near Beylik Keuprit. The course of the road has at last been finally settled by the discovery of the long-sought site of the Roman colony GERMA, which closes a great controversy.<sup>2</sup> The Latin inscriptions naming the *colonia* (C.I.L. iii. 284-5) were copied at Masut keui in 1554 A.D. by the members of the embassy sent by the Emperor Charles V. to the Sultan Suleiman I. who at the time had his court at Amasia. But the accounts of the route followed were vague: where was Masut keui? In 1863 Prof. Kiepert, at Prof. Mommsen's request, examined the narrative and placed the village on the west of the Sangarios, not so very far from its real position. But recently he came to think that the route of the ambassadors was along the Porsuk Tchai valley,<sup>3</sup> and accordingly in his map of 1890 he places the village north-west of Bitcher. It is in reality identical with Perrot's "Massik keui," and lies two hours north of Sivri Hissar and a little over half an hour south-east of Dumrek. The actual site of Colonia Germa is fifteen minutes east-south-east of Dumrek, and Soman Hissar is the Byzantine fortress corresponding to it.<sup>4</sup>

<sup>1</sup> Dr. Korte's identification with Peli is probably correct (*Athen. Mittheil.*, 1897, p. 19 ff.).

<sup>2</sup> *Hist. Geog.* pp. 224, 237.

<sup>3</sup> In a paper published in *Globus*, vol. lli. (1887).

<sup>4</sup> Route as far as Pessinus:—From Bitcher to Karadat (1½ h., in S. direction except for the last ½ h. when we turned sharply W.), Isledjik (55 m.), Soman Hissar (19 m.) [Karadja Kaya (10

The village MOUSGA (see Ramsay, *Hist. Geog.* p. 225) is clearly to be identified with the ruins called Arslanlı, which were visited by Hamilton in 1836 and are placed by him about four miles south-east of Hortu. We crossed over the hills from Siliba to examine them; from that village they are distant two hours and ten minutes. About a mile to the east are some fine hot springs, which gave to this spot the sanctity it still possessed in the sixth century of our era.

After a visit to Pessinus, we proceeded to examine the country to the south near the Sangarios. Thirty-five minutes west of Hadji-Ali-Oglu, a village on the river almost due south of Sivri Hissar, there is an old site called *Veledler*, i.e. "the sons," a name derived (so runs the tale) from two sons of a Pasha of Ak Hissar<sup>1</sup> (Amorion) who had been sent thither by their father to superintend his property, and died (or were killed) there. Perhaps it is Ptolemy's Abrostola<sup>2</sup> in the province of Asia, mentioned also by the Peutinger Table, in which a succession of parting ways gets entirely jumbled up. But certainty can only be attained by the discovery of an inscription with the name. From hence we followed the course of the Sangarios to its junction with the Bunar-bashi stream. Just below the junction the road to Amorion crosses the latter stream by a stone bridge called Ak Keuprü, and keeps along the left bank as far as Abeddin *tchiftlik* (half an hour before reaching Waisal), where it re-crosses to the right bank. Below Waisal there are two cemeteries full of remains carried from Amorion; but the stones are much weather-worn and no inscriptions were to be seen.<sup>3</sup>

m.]], Dumrek (32 m.), Masud keui (over  $\frac{1}{2}$  h.), Babadat ( $\frac{1}{2}$  h., E.); back to Masud, whence Eldjik ( $\frac{1}{2}$  h.), Sivri Hissar (1 h. 35 m.), Tekören (1 $\frac{1}{2}$  h.), Siliba (30 m. ?), over the hills to Arslanlı (2 h. 9 m.), Katchash (23 m. S.E.), Kadynjik ( $\frac{1}{2}$  h. S.S.W.), back over the hills to Bala-hissar (Pessinus, 2 h. 27 m.).

<sup>1</sup> We several times heard this name applied to the ruins. Hamilton's "Hergan Kale" is unknown. Is it not a misunderstanding of "Djirgin Kale" (Djirgin being the former name of Azizic, the principal town of the district, re-named after Abd-ul-Aziz)?

<sup>2</sup> On Abrostola, *Hist. Geog.* p. 236.

<sup>3</sup> Route from Pessinus back to Angora:—Fet-oglu (2 h. 27 m.), Hadji-Ali-oglu (39 m.), *Veledler* (35 m.), Bostanlar (15 m., just over the Sakaria, where it bends to S.), Ak Keuprü just below junction of Bunarlakshi Su with Sakaria (45 m.), Kutchuk Buzludja (37 m.), Büyük Buzl. (18 m.), Ab-ed-din *tchiftlik* (43 m.), Waisal (28 m.), *Bunarbashi* (1 h. 35 m.), Hamza Hadji (20 m.), AMORION (25 m.), by Bunarlakshi to Zunk (53 m.), Veni keui (1 h. 55 m.), Lower Tuluk (15 m.), Kaldirim (55 m.), Çenk Tepe (55 m.), Elles Pasha (1 h. 49 m.), Topalli on Sangarios [ca. 1 h.; we made circuit by Bolat Hissar (1 h.) to Topalli (63 m.)], Tchokmak (1 h. 45 m.), Kabak (2 h. 56 m.), Bash-keuprü keui (1 h.), Etrek (1 h.), Kavandji keuprü (1 h. 20 m.), Yarre (1 h. 25 m.), Merdjan (31 m.), Bedin (13 m.), Aivallı (7 m.), Yürme (28 m.). Back to Kav. Keuprü, whence Tehanak-

From Amorion we went east-north-east to the Sangarios, which we struck at Elles Pasha, and followed as far as the bridge called Kavundji Keuprû, whence we diverged to Yürme (EUDOXIAS) in order to examine the fine church there. It is described by Mr. Crowfoot in the present number of the *Annual*. On our way back we stayed the night at Yarre, a village rather less than an hour and a half from the bridge, and found a very interesting "Hittite" relief, which had been dug up from a *tepe* beside the village. Our next task was to find VINDIA, a town of the Tolistobogioi (according to Ptolemy), lying on the great road from Dorylaion to Angora. There is little doubt that it is to be placed at Kara-eyuk ("Black Mound") where a great mound of at least a mile in circumference marks the site of an important city. PAPIRA is to be identified with an early site immediately behind Balik-koyundji, where we found fragments of red-faced Cypriote pottery. In a cemetery a few minutes west of the village we copied a milestone of Hadrian, numbered xxiv. The eighth milestone is now at Aladja-atli, a village three hours south-west of Angora. These identifications necessitate some alteration in the numbers given by the Antonine Itinerary.

#### § 6.—From Angora to the Halys.

From Angora this road continues eastwards to Tavium and we followed it as far as Eccobriga. A description of the route may be found in Sir C. W. Wilson's "Handbook to Asia Minor" pp. 19-20; and we need not do more than indicate the conclusions we reached. SARMALIA<sup>1</sup> (Ptol. V. 4, 8) is perhaps to be placed at a site called Sângûr, half an hour south-west of Assi Yuzgat. The ruins there are entirely characterless, but the village contains a considerable number of remains (including one inscription). ECCOBRIGA<sup>2</sup> we should identify with a very ancient site on an isolated, conical hill, an hour east of Yakshi Khan. The fragments of pottery here are exceedingly numerous and varied: unpainted yellowish ware, early painted fragments including pieces of Mykenacan style and of

djik (1½ h.), Bolatli station (3 h.), Basra (½ h.), Beyjaz (55 m.), Kara-eyuk (1½ h.), Hadji Toghruî (½ h. in direction 325°), Tekke on hills (40 m.), thence straight to Ala Genz S.E. of Malli keui (4 h. 15 m. fast riding, about 18 miles); Assarli kaya (1 h.), Assarli kaya keui (ca. 7 m.), Balik-koyundji (1 h.), Aladja-atli (2 h. 20 m.), Angora (2 h. 58 m.).

<sup>1</sup> *Hist. Geog.* pp. 257, 260.

<sup>2</sup> *H.C. II. cc.*

"Lydian" fabric, and ware similar to some found by M. Chantre at Kara Eyuk (*En Cappadoce* p. 85 &c.) and to a Cretan fragment described by Taramelli (*Amer. Journ. Arch.* 1898 p. 294).<sup>1</sup>

§ 7.—*The country south of Angora and round Lake Tatta.*

The country south and south-east of Angora and round the great Salt Lake occupied the remainder of our time. A great part of this region has hitherto been known only from a journey made by W. F. Ainsworth in 1839 and is almost a blank on the maps. In 1895 Dr. F. Sarre made a short journey through the country on the south-west of the lake and improved that corner of the map. We can only indicate briefly the results of our journey, for the present article is already exceeding all due bounds.<sup>2</sup> From south and south-east a great number of important roads converge on Angora and all coincide beside Tchakal keui,—the Roman roads by Parnassos to Caesarea and to Colonia Archelais (the latter coinciding with the Pilgrims' Route), and a road down by the west side of Lake Tatta to Konia, while the Byzantine military road passes a little to the south. Tchakal keui is thus a most important point both in ancient and in modern times, and at or near it lay GORBEOUS,<sup>3</sup> the royal seat of Kastor, prince of the Tektonages, who was slain by Deiotarus (Strabo, p. 568). Between Gorbeous and Angora was a station DILIMNIA, which was probably beside Örendjik

<sup>1</sup> Route from Angora to Teheshnir keuprü:—Kayash (40 m.), opposite Kizildja keui ten minutes to left (45 m.), Orta keui (25 m.), ruined Khan (1 h. 45 m.), small tumulus *Tashlı ören* [Hassan-oglu (52 m.)], *Tash Bunar* beside the direct road from Hassan-oglu to Kaledjik (1 h.; reckoned 1 h. from Hassan), Yenishan (35 m.) in same dere as Assi Yuzgat (5 m.). Cross watershed of Sakaria and Halys to Kilibjar (1 h. 56 m.), along right bank of Takanli Su for 35 m., then turn up *dere* and over hills and across the Halys by a ford to Yakshi Khan (3 h.); [Kürüghin Kale (Eckenriga, 55 m.)], along Halys by Haidarlar (2 h. 20 m.), Kara Ahmedli (1 h. 20 m.), Teheshnir keuprü (1 h. 30 m.).

<sup>2</sup> Route from Teheshnir Keuprü as far as Shedit Hüyük:—Karaketchili (39 m.), Utchemli (2 h. 48 m. = Afilbey k.), Kartal (*kaimmakamlık*, 1 h. 45 m.), Tol (1½ h.), Beinam (under 3 h.), Tchakal (ca. 1 h.), Kara-oglan (55 m.), Örendjik (53 m.), Dikmen k. (1 h. 55 m.) and back by Roman road to Örendjik; along the post-road to Tchakal (2 h. 35 m.), Aghaboz (1 h. 33 m.), Hadji Izet Bey *tekiftik* (2 h. 14 m.), [Hüyük (19 m. N.W.), Kartal (56 m.)], Abbasli (1 h. 3 m.), over hilly country to Tchidemli in a *dere* (2 h. 15 m.; Baghtehe Karadallar is beyond ridge on left); S.W. to Adji üz stream (1 h. 44 m.) on direct road from Alilusli, Ayshar (37 m.), S.E. again to Adji üz stream (2 h. 5 m.), Karaburun (20 m.), Shedit Hüyük (1 h. 40 m.).

<sup>3</sup> Ramsay places it near Beinam, a village about an hour east (*Hist. Geog.* p. 256, etc.), which comes to the same thing.



keui near the head of Mohan Giöl. Twelve minutes east of Tchakal where there are now three milestones (one of Domitian set up by Caesennius Gallus and bearing some number between XV and XVIII, one of Hadrian erected by Larcus Macedo numbered XXV ΚΕ, and one of Aurelian), the Roman road diverges southwards to Aghaboz. For forty-five minutes eastward from this village the *agger* can be traced with the greatest ease, and for some distance the confining lateral blocks (*margines*) still remain. ΟΡΟΣΟΛΟΓΙΑ ('Οροσολογία, Ptol. V. 4, 8) lies near Hadji Izzet Bey *ichiftlik* (2 hours 15 min. from Aghaboz, on the north side of the Tabanlı Su valley). Its side is marked by one of those *hilyikls* which throughout all the country to the south are as the sands of the sea-shore for multitude; we picked up here specimens of red Cypriote ware and early painted pieces. At Karali, a village on the slope of the hills to north-west, I copied two milestones, one numbered XXXIIII ΑΔ recording the restoration of the road by [Antoninus Pius and] M. Aurelius in 161 A.D., the other the XXXVIIth. milestone of Diocletian. The road then passes below Abbaslı and down a glen by the Tatar village Karaburun ("Black-nose") to Shedit Hüyük, the site of the bishopric ASPONA. In the cemetery of the village is the 65th milestone of Constantine and [Licinius] (307-323). The inscription is engraved on a pillar, which had been carried all the way from Angora for the purpose; for on the other side there is an inscription recording its erection by ἡ μητροπόλις τῆς Γαλατίας β' νεωκ(όρος) Ἀγκυρα in honour of Cornelia Salonina, μητέρα κάστρων, γυναῖκα τοῦ Σεβ(αστοῦ) Γαλλιανοῦ.

From Shedit Hüyük the road crosses the lower spurs of Pasha Dagħ and passes over undulating ground by Mulkus Obasi keui, on either side of which the *agger* is still visible, to Parlassán (reckoned two hours distant from the Halys), which bears the name and occupies part of the site of the important city PARNASSOS. There is a large *hilyikl* here and numerous remains both in the village and in the cemetery, including an unnumbered milestone of Constantine, etc., which bears a fragment of a Latin inscription on the back. Parlassan lies near the head of a narrow, but fertile and well-watered valley, bounded on the east by the ridge of Kara Sengir Dagħ and separated by low hills from Kotch Hissar (about two and a half hours distant). The copious water-supply clothes the valley with verdure, a grateful sight to the traveller who for many days has seen nothing but bare and dreary hills and undulations! But the whole strip of country between

the lake and the river is a smiling land compared with the dreary stretches on the north and west and south.

At Parlassan the roads to Caesarcia and Archelais fork. The former runs over undulating ground past Obasi Yeni Yapan (near which is the site of a Byzantine village), Demirdji keui, and Boghaz keui to Bazirgian Hüyük (about one and a half hours from the Halys), which seems to be the site of NYSSA<sup>1</sup> (over six hours from Parlassan; xxiii ■ P from Parnassos according to *Itin. Anton.*, which is seldom right in its numbers). There are remains enough in the neighbourhood to stock a large site. From thence the modern road runs parallel to the river, between the ridges of Ekedjik and Sarykaraman Daglı; but the ancient road ran along the riverside as far as Yarapison (ZOROPASSOS), if we may assume that Gregory of Nyssa, returning to his see probably from Caesarcia, travelled by the ordinary road (*ἡ ὁδὸς πᾶσα ἐπιτοράμιος ἦν*, *Ep. vi.* ed. Migne). We were unable to explore farther than Muradlı Hüyük, a small ancient site to the south-east (see the map).

The line of the road to Archelais could be followed by the eye for miles, running south-south-east between the ridge that bounds the lake and Ekedjik Daglı, but our time was too short to explore it. We heard of ruins at Yagmur Hüyük, ten hours from Parlassan and five from Devekowan, a village on the line of the road which we passed on our way to Kotch Hissar.<sup>2</sup>

In 1885 Prof. A. von Domaszewski published (from a bad copy by a certain Leonardi, an apothecary at Angora) an inscription which was said to have been found at Akardja, "*in der Nähe des Salzsees, an einem Brunnen*," and ends thus:—

. . . NNNWNA?  
XONCONOYAHAB  
Ϟ MOC Ϟ

<sup>1</sup> *Hist. Geog.* p. 287.

<sup>2</sup> Route from Shedit Hüyük to Kotch Hissar: Over low slopes of Pasha Daglı and rolling country to Hadji Tahir k., ½ of direct road (3 h. 18 m.), Fezulagh *tehişlik* on direct road (2½ h.), junction of roads from Tehikin-agil and Parlassan (35 m.), Mulkus Olasi (45 m.), Parlassan (48 m.), Palas (25 m.), Ishekli (37 m.), Haidarli (15 m.), Deliler (23 m.), Olasi Yeni Yapan (1 h. 8 m.), Demirji (20 m.), Hüyük below Tehikin-agil (1 h. 35 m.), return to Demirji, whence Boghaz keui at foot of the plateau (2 h.), *Bazirgian Hüyük* (fully 1 h.), Harmandal (35 m.), Deve-dani (1 h. 15 m.), *Muradlı Hüyük* (45 m.), *Tihaili Hüyük* (55 m.), back to Harmandal, whence we go towards the lake by Kutukli k. (23 m.), Shalanlı (1 h. 3 m.), Abkuli (1 h. 10 m.), Manuli (45 m.), Devekowan (1 h. 5 m.) on road from Parlassan to Ak Sema, reported 5 h. from former; whence by circuit over hills to Kotch Hissar (3 h.).

(*Arch.-Epigr. Mitth. aus Österr.* 1885, p. 131). In a letter written to me at Afion Kara Hissar in Aug. 1897, Prof. Ramsay recalled this inscription to my memory, and suggested that the ethnic preceding ἀρχον[τες β]ουλῆ δῆμος was very probably [Κιν]νηνῶν.<sup>1</sup> We made enquiries about this village Akardja and found it near the head of the lake (see the map). The inscription is still extant and reads

Ἀγαθῇ Τύχῃ Μ. Ἀντώνιον Γορδιανὸν τὸν θεϊότατον αὐτ(ο)κράτορα τὸν ἐκ θεῶν [Κιν]νηνῶν ἀρχοντες βουλῆ δῆμος.

There can be no doubt about the restoration; but the stone has long been built into a foundation and has been carried thither nobody knows whence. There is a small site not far off at Böyük Kishla; but ΚΙΝΝΑ was an important city (a bishopric), and was probably situated at Yarashli, a village with extensive ruins and a rather remarkable *kale*, beneath the highest peak of Karadja Dagb, three hours north-west of Kulu keui (which is over two and a quarter hours from Akardja).<sup>2</sup>

There is another important site at Kozanlı, south-south-west of Yarashli, on the direct road from Angora to Konia. The cemetery of the village as well as other cemeteries not far off are packed with inscribed and uninscribed stones. Unfortunately the inscriptions give no clue to the ancient name, but its identification with PITNISSOS (or PETINESSOS)<sup>3</sup> seems fairly certain and suits well Strabo's words ἡ τε δὲ Τάττα [τοιαύτη] ἐστί, καὶ τὰ περὶ Ὀρκαόρεως καὶ Πιτνισσὸν καὶ τὰ τῶν Λυκαόνων δροπέδια ψυχρὰ καὶ ψιλὰ καὶ ἀναγρόβοντα, ὑδάτων δὲ σπάνις πολλή (p. 568).

<sup>1</sup> See his own account in a paper entitled "Asiana" which has just appeared in the last number of the *Bulletin de Corr. Hell.* pp. 234-5.

<sup>2</sup> Route from Ketch Hissar to Konia:—*Khandil Hüyük* near Lake (45 m.), Bush Khan (3 h. 27 m. very fast, reckoned 1 h. from Ketch Hissar), head of Lake (25 m.), *Ak-in Hüyük* (45 m.), Akardja (1 h. 10 m.), [Böyük Kishla (37 m.)], Shekerli keui (Tatar, 25 m.), Kulu keui (2 h.), Mendim k. (1 h. 40 m.), Yarashli (1 h. 5 m., reckoned 3 h. from Kulu), Kozanlı (35 m.), Arslindji (30 m.), Kozanlı (1 h. 35 m.), (visit various old cemeteries); At-Kafasi (reckoned ca. 2 hrs. : we lose the way), opposite Böyük Beshkavak (1 h. 39 m.), Kutchuk Beshkavak (35 m.) at foot of Kara Dagb, *about* to Kutchuk (or ? Kutuk) Ushak (1 h. 35 m.), Yenidjola (1½ h., but reckoned 2 h.), Kushdjali or Hadjilar (1 h. 52 m.), southwards to Bunarlashli (1 h. 40 m.), Bunarla keui (6 m.), Tcheshmeli Zehir k. (2 h. 50 m.), Kuyuli Zehir k. (35 m. fast), [Lek k. (1½ h. fast)], Isuyyu (3½ h., reckoned 4), *Tchorgia Hüyük* (2 h. 53 m.), *Karu Tepe* (1½ h.), Inevi (1 h.), Horkenli or Dongdurma (4 h. 20 m. going 4 miles per hour), Eski-il (4 h. 15 m.), *Tuzun Hüyük* (reckoned 1 h.), Tash Bunar (2 h. 15 m.), Hadji Bey Yailasi (2½ h.), *Toprak kale* (32 m.), Tekir k. (1 h. 20 m.), Hoides Yaila (1 h. 25 m.), Suwarek (1½ h.), Yaila (3 h. fast, reckoned 4), Kayadjik yaila (3½ h. very fast), Konia (2 h.).

<sup>3</sup> See *Hist. Geog.* p. 227.

In the country bordering the east side of the lake the number of ancient sites is a positive embarrassment to the geographer (for none of them yields up its name) and a source of astonishment to the historian who wanders over these desolate plains which produce nothing but pasture for great flocks of sheep and goats. Karanlı Kale, a commodious fortress well-built of squared blocks, less than two hours west of Yenijoba, no doubt represents EUDOKIAS,<sup>1</sup> which appears in three of the later *Notitiae* in place of GLAVAMA,<sup>2</sup> situated apparently at Tchorgia Hüyük,<sup>3</sup> which like Kara Tepe (one and a half hours south-east) has been denuded of its remains to supply the needs of the villagers at Insuyu and Inevi (a *mudurluk*). PSIBELA-VERINOPOLIS<sup>4</sup> is fairly certain at Herkenli (Dongdurma) and PERTA at Tuzun Hüyük ("Salt Mound") or perhaps at Eski-il ("Old Tribe") which is an ancient site, in spite of Dr. Sarre's disclaimer,<sup>5</sup> and has appropriated most of the remains of the old cities in the vicinity to fill its enormous cemeteries. Another ancient town of considerable size, Toprak Kale ("Earth Castle"), thirty-two minutes from Hadji Bey Yailasi, may be KONGOUSTOS. There were two small towns (or two quarters of one town) at Tcheshmeli and Kuyuli Zebir on the direct road from Angora to Konia, but the inscriptions found there are silent as to the name or names. Finally SOATRA or SAVATRA has been rightly placed by Prof. Ramsay at Ak Ören,<sup>6</sup> reported to be five hours west-south-west of Eski-il and about two and a half hours (in the direction of about 150°) from the *yaila* near Toprak Kale. The ruins here must formerly have been very conspicuous (Prof. Ramsay says only "extensive"; we did not visit them, knowing he had examined the site), for the fame of them is still noised abroad through all the country on the North. Weeks before we arrived in this neighbourhood, we were told over and over again, "If it is ruins you want, go to Ak Ören"! The ancient name

<sup>1</sup> *Hist. Geog.* p. 344.

<sup>2</sup> *Ibid.*

<sup>3</sup> Fragments of early painted pottery, ornamented merely with lines, were found here.

<sup>4</sup> *Ibid.*

<sup>5</sup> *Arch.-Epigr. Mitth.* 1896, p. 33; *Hier fanden wir keine Spuren einer antiken Ansiedlung.* But in his volume "*Reise in Kleinasien*" (p. 98 f.), he says that Perta is perhaps to be sought here. *Die kolossale Ausdehnung des Gräberfeldes zeugte von der Grösse dieser Ansiedlung, die, wie aus den vorhandenen spätromischen oder byzantinischen Skulpturfragmenten hervorgeht, in frühe Zeit zurückreicht.*

<sup>6</sup> It cannot, however, lie so far to the south as he puts it ("4 hours S.W. from Eski-il," p. 343); it is more west than south of Eski-il. He does not name the site, but the identity is certain.

is apparently retained as Suwarek (see map), a village to west-north-west, whither a great number of the ruins have been transported.

Those who care to study our routes will see that this country has not yet been exhausted. The very centre of the Axylos, in particular, still remains a hidden land; but it contains very few villages and it is avoided by the lines of communication between the lake and the west, which keep more towards the north (passing below Katrandji Inler) or more towards the south (running over the plateau above Insuyu). Their importance at the present day depends on the great salt trade: and in ancient times it was doubtless much the same.

## NOTES UPON LATE ANATOLIAN ART.<sup>1</sup>

BY J. W. CROWFOOT.

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Beginnt nicht schon mit der byzantinischen Kunst etwas völlig Neues? . . . Dies hat allerdings seine-zwar auch nur bedingte-Richtigkeit, wenn man unter Antike die griechische Kunst des Phidias und Iktinos versteht. . . . Es gab einen Entwicklungsgang in der antiken Kunst der römischen Kaiserzeit, und zwar auch einen aufsteigendem, nicht bloss einen Niedergang, wie man allenthalben glauben machen will. . . . Die byzantinische Kunst ist zunächst nichts Anderes als die spätantike Kunst in oströmischen Reiche.—ALOIS RIEGL, *Stilfragen*, pp. 272-273.

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### I.—ORNAMENT ON PHRYGIAN STELAE.

PHRYGIA is remarkable for the variety (and number) of its funeral monuments: in one place the sarcophagus, in another the altar, in a third the stela. The last named was fashionable in the land of the Praipenissians, whose ancient centre was Soa in the neighbourhood of Altyn Tash. The Phrygian stela was often of considerable size, six feet or more in height, and fixed upright in the ground or in a socket by a wedge-like tongue, which still remains in some cases.

The central field is filled sometimes by figures of the deceased, often more than life-size, never by ridiculous little dolls such as are found further east. The place of the figures is sometimes taken by a door: in this case the busts of the departed are occasionally sculptured in an arch-shaped pediment above (cf. Texier, *Description de l'Asie Mineure*, Pls. 38, 51). Otherwise the pediment is filled by various symbolic or decorative subjects—two lions with a prostrate bull or merely its head between them, an eagle with wings "displayed," dolphins with small fishes in their mouths, and in one case Herakles and Cerberus. All round the

<sup>1</sup> For the place and description of the various sites mentioned here I must refer readers to the preceding paper and the map, which accompanies it.

central field runs a border some inches broad and filled with decorative designs: the empty spaces still remaining, between the heads for instance of the persons represented, are covered with various emblems, distaffs, toilet boxes, mirrors, combs, cosmetic bottles for the women; tablets, ploughs, pruning knives, and other trade signs for the men. The representation of these objects may be traced perhaps to the same feeling which prompted primitive man to bury certain things with the deceased, or it may be only a "sign of sex and occupation. Finally, small birds seated upon baskets are of frequent occurrence: they meet us also in the Roman catacombs and are probably symbolical of the departed soul.<sup>1</sup>

The workmanship is very lax and careless, with the fatal fluency of Cypriote or Palmyrene art. These stones in fact were carved to order by a firm or guild of masons in a district where, as Mr. Anderson reminds me, stone was very cheap: often in different villages we find slabs identical in every detail, differing only in the inscription: clearly the firm or guild had a number of stock samples, which it varied only slightly to suit the more fastidious customers (cf. Ramsay, *Cities and Bishoprics of Phrygia*, ii. p. 627). The fidelity, grace, and pathos of Roman stelai have vanished as utterly as the spiritual grandeur of the Kerameikos: the display of every article of feminine toilet is like a parody of the latter. In the accessories a curious symbolism, precursor as it were of mediæval heraldry, seems to have found an early expression. But the vulgar pretentiousness of the work and the *banalité* of the inscriptions make us hesitate before comparing such slabs with those brass effigies of the later middle ages, which revive in some measure the same scheme. I have emphasized the badness of these bourgeois provincial monuments, because it is just this badness, this facility, which makes them such useful witnesses of the past: in the work of these masons we need make no personal equation, we may be sure that each changing fashion would be blindly and faithfully mirrored; we can trace a

<sup>1</sup> The door-slabs have been discussed at some length, by Noack (*Athenische Mittheilungen*, xix. p. 326): he describes all the utensils represented upon their panels with extreme minuteness. Rightly he rejects a fanciful suggestion of Joulin (*Revue Archéologique*, xxiv. p. 183) that each of these panels is to be regarded as a room after the fashion of Egyptian monuments. The recurrence of the same objects upon figure stones is decisive against this, as also are the door-handles, etc., which are often carved. Noack himself suggests that their origin is to be found in the façades of Phrygian rock monuments, on which Anderson asks:—"But is the door a prominent feature there? Ramsay seems right in taking the door as indication of the temple (part for whole) (e.g. *CE.* i. p. 99, ii. p. 367, &c.). Importance of idea of 'door' shown by the word being inscribed on other kinds of monuments (altars, &c.)."

natural development undisturbed by the intrusion of great original workers. But, at the same time, we must not forget that this district was backward even in antiquity, and therefore that the works here found can be used to illustrate the character only, not the execution, of the artistic epochs to which they belong—epochs in which as it seems to me ornament is of the first importance.

A decorative margin, as I have already said, usually runs round both "figure slabs" and "door slabs": it also runs round smaller stones, the field of which is entirely occupied by inscriptions or symbols, and thus has a tolerably wide extension in Asia Minor. This is the one purely ornamental object in stelai of this class, and it is upon this which I wish to dwell.

A wavy band of leaves or flowers, or fruit, is the common subject of this border, but there are two distinct methods of treatment—conventional and natural.

In the former, a well-modelled stem rises from one side of the foot of the border: it curves to the opposite side and there forms a cup, from which depends a flower of some kind, while a second stem also shoots upward from the same calix and repeats the same process. This scheme is modified in many details, but the essential qualities all appear in an example from Yalynyz Serai (Fig. 1). This is a simplification of such a



FIG. 1.

pattern as that figured in Lebas and Reinach's *Voyage Archéologique—Asie Mineure*, Archit. Plate 34. There is a more striking variant at Aikürük, on which I noted a rose, grapes, two pomegranates, a violet (?) and another nondescript flower, between each of which was the calix suggesting a continuous growth! The appearance of the grapes leads us on to another development.

The second method follows the natural order more closely. A good example of this comes from the Circassian village just named—Aikürük, about an hour north of Altyn Tash. Two figures fill the field, and in the centre of the horizontal border above them rises a vine-stock, spreading on



both sides in wavy stems, from which grow alternately bunches of grapes and veined vine leaves (Fig. 2): down the side of the monument is a variant, also natural—unveined vine or ivy (?) leaves springing from a wavy stem (cf. Radet, *En Phrygie*, 1895, Pl. VI. for the latter).

These two types of decoration are so clearly distinct that one is tempted to ask whether they may not be referred to different periods. Fortunately there is some unimpeachable evidence to assist us.

The conventional border, with its multitude of diverse blossoms, can be traced further back: the calices have well-known artistic "connexions." At Ankyra, for instance, on the door-posts and lintel of the temple of Augustus ■ similar combination of impossible flowers occurs: the ruins of Aizanoi, just west of this district, are full of similar motives (for the former see Perrot, *Exploration de la Galatie*, Pl. 15-31; for the latter, Texier, *op. cit.* Pl. 23-33). The examples given in Riegl's *Stilfragen* (pp. 249, 250) show the elements from which this calix has been evolved. The sweeping curves and delicate craftsmanship of the first century have disappeared:



FIG. 2.

the makers of our gravestones are either later in date or clumsy country masons, perhaps both. But in Anatolia corruption is not followed by a sudden death: for this style we might suppose a lingering death of centuries were ■ not for more conclusive evidence.

A few of these stones bear an actual date: in the inscriptions upon others the names and the phrases give ■ a clue as to their approximate period, and in figured stones the fashions of wearing beard and hair are an additional help: in many of the doors of course, in those figured by Texier for instance from Pessinus (Pl. 51), there is no guiding thread whatever, and epigraphy in our present state of knowledge is of very little service. The examples which follow are all taken from notes collected during a short journey in this district; it was only after I had left this part, that on looking through these notes I thought it possible that some chronological data might be obtained. I was unable consequently to test any theory upon ■ larger field, and can therefore only put forward the present arrangement as a tentative suggestion.

I saw only two dated stones in this district. At Yalynyz Serai there is a doorslab of the year 175: the decoration consisted merely of a degenerate variant of that figured above (Fig. 1). The other is at Ghirei Tchaleui, of the year 208: it represents a woman lifesize: the small pilasters by her side are covered with the latest development of the conventional border—the curves have lost all their freedom, the leaves, which are all the same, ivy or vine, grow sometimes from the centre, sometimes from the extremity of the calix. This certainly looks like a transition work. The names (Gaïos and Granianos) which I have seen upon two other stones, where the conventional type is better treated, might well belong to an earlier period.

From stones which display the natural type I have obtained the following results.

(1) At Arkürük a small slab with semicircular pediment containing a cross in a circle: the last line of the inscription which fills the field runs—*Χρηστιανοὶ Χρηστιανοὶ*. The decorative border is occupied by a branch covered with grapes and almost without a leaf, carved in a very careless manner. There is a replica of this stone at a neighbouring village Doghanlar, which is also Christian. (Fig. 3). In Phrygia this bold



FIG. 3.

profession of faith appears on monuments earlier than elsewhere: a dated example occurs near Ushak, *anno* 278, and the whole series is probably Montanist in character. (For a similar formula in another district *v. de* Vogüé—*Architecture dans la Syrie Centrale*, Plate 96—the tomb of Eusebius Christian, dated Aug. 27, 369.)

(2) Also at Arkürük: a large stele representing two thin elongated figures in very low relief. The man is clean shaven and of a heavy post-Constantinian type; the woman's fingers are very thin and long: both these characteristics and the general flatness of the work point to a still later date for this. In the decoration here again all natural grace has departed nor is there any relic of the calix: the margin is made up of extremely stylized ivy leaves. *Artem expellas furca, tamen usque recurret!*

(3) Also in Aikürük, the stone mentioned above (Fig. 2). The coiffure of the woman, which is one of those used by the successors of Julia Domna (Fig. 4), the double repetition of the name Domna, and the short beard and full hair of the man, all point to the third century. A second stone with the same decoration and the same characteristics also occurs in this village.



FIG. 4.

(4) At Azishekler, near Piribeyli and consequently far removed from this district, a stone with a long metrical inscription containing the name Aurelius Karikos. The name Aurelius became common after the time of Caracalla, so that we may refer this stone also, with its free margin of alternate grapes and leaves, to the third century.

Ramsay (*Cities and Bishoprics of Phrygia*, vol. 2, p. 368) publishes a doorstone from Akmonia, which shows both forms used in combination: there is no inscription, nor evidence of date whatever. However, such an example would not interfere with the order of evolution which the cases above quoted seem to establish—the decline in Phrygia of the traditional type of decoration about the year 200, and the consequent development of a naturalistic style.

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But when we leave Phrygia, the question becomes more complicated.

Vine-leaves and grapes are models always of course before the Southern's eye, and a craftsman with sufficient dexterity to copy a conventional acanthus could reproduce them as easily. From the earliest periods of ancient art we could find, as in Gothic art, sporadic examples of naturalistic work, but an isolated instance is so easily intelligible, so capricious, as to lose its historic importance. The artistic movements in the first century A.D., so brilliantly expounded by Wickhoff, might seem more to our purpose (*see* von Hartel und Wickhoff, *Die Wiener Genesis*, p. 21, *fol.*). Wickhoff has here shown what a great advance upon earlier Hellenistic work the Augustan sculptors made in this very branch: they were the first to achieve a perfectly natural style. The Flavian craftsmen went further: for careful naturalism they substituted a free style of decoration, which the writer can only parallel with modern impressionist and Japanese works: in the relief sculptures a century later on the arch of Septimius he notes the disappearance of this school (*ib.* p. 39). The decoration of the first century

door-jambs at Siah (de Vogüé, *op. cit.* Pl. 2, 3), weak as it is, proves that the Augustan movement reached Syria; but the delicate Italian works published by Wickhoff find on the whole few worthy counterparts in Asia Minor. The bondage of popular baroque Hellenism lay too heavy upon the land to permit the wide reception of a style so subtle and so new as the Flavian: hence those wearisome rows of palmette and acanthus from theatres, temples, and tombs innumerable. The best decoration occurs upon the most Roman works—the temple at Aizanoi and that of Augustus at Ankyra (and here I think the stiff oak-leaves may be only an allusion to the civic crown, with which the Emperor was often represented): and a new symmetrical combination of conventional with natural, already described, was the best result of this Italian infusion. The difference between the temple at Aizanoi and that at Ankyra is just such as might have been expected between buildings before and after the Flavian movement: the little vases upon the fluting of the columns are charming indications of the new spirit. Now this temple has just been assigned, on historical not stylistic grounds, to the time of Hadrian, 125–127 A.D. (Körte, *Festschrift für Otto Benndorf*, 1898, p. 209–214). But the natural ornaments, which I have discussed, come from a different century and stand upon a different level, that of the lower handicrafts. From the paintings at Pompeii to the mosaics of Ravenna, in each of the first five centuries, we find the vine represented in all its natural freedom, as the covering of a wall or panel: the fact that these decorators chose the vine, rather than an arabesque like the Saracen, or an intricate development of the acanthus like the Greek, is of the first importance in our eyes. For by an easy transition from this, the vine or the ivy may be pressed into a narrow architectural border, and made to serve a subordinate decorative purpose.

In Adam's plates of the palace of Diocletian at Spalatro there is only one (46) which shows much analogy to our types, but examples recur on later works; in the church at Kaja Kalessi for instance (Headlam, *Ecclesiastical Sites in Isauria*, p. 13, *J.H.S.* supplement) the doorposts and lintel are ornamented with grapes, vine-leaves and birds; and in a church at Adalia there is a pilaster capital with grapes and a vase (Lanckorowski, *Städte Pamphyliens und Pisidiens*, I. p. 27, Pl. XI. c.). And again the ivory panels of the throne of Maximianus at Ravenna of the sixth century are similarly decorated.

On the other hand, the churches of the fourth, fifth and sixth centuries in Syria, published by de Vogüé, show nothing of the kind—orientalism (?) has triumphed over naturalism. And so, too, upon later gravestones in the cemeteries of Phrygia and Galatia I have seen frequent examples of this "oriental" tendency—rosettes of various kinds, trellis work, geometrical patterns, zigzags, diamonds, which may be partly attributed to the prosperity and consequent influence of the Sassanids.

In Byzantine art of the sixth century we may distinguish three elements which supply its decorative needs—the oriental, the natural, and the classical. It gathered, that is to say, all previous styles together. But, just as in Italy architects even in the Gothic period never freed themselves entirely from their Roman models, so in Byzantine art the Hellenic element gradually preponderated: Riegl<sup>1</sup> has acutely noted this archaistic character of the Byzantine empire and perhaps even exaggerates it. The naturalistic element however remains as certainly in some places as does the oriental, and this makes one anxious to localize its earlier developments so far as possible.

## II.—THE CHURCH AT YÜRME.

Of all the churches throughout ancient Galatia, scarcely one stone is left standing upon another: only at Angora and at Yürme are there exceptions to this rule.

The church at Yürme has been mentioned by several travellers (Humann, *Reisen in Kleinasien*, p. 32, Ramsay, *Bull. de Corr. Hell.* VII. 1883, p. 23, Murray's *Guidebook*, *ad loc.*), but it has been dismissed by each in a single line, and that has not been always free from mistakes. The following notes may serve as the beginning for a study: more than this I cannot attempt. Yürme lay some distance off the route which we had intended to adopt, and we were only in the church for two hours on one of the hottest days towards the end of July. We started without knowing in the least what to expect, and so were not able to do all that might have been done even in so short a time by others better prepared. These notes may suggest problems to a future traveller and so simplify his task.

There are several difficulties to be overcome by anyone who wishes to

<sup>1</sup> *Stilfragen*, p. 273 and foll. Others have noted this too, Bayet and Diehl for example.

study this building. The church is now a complete ruin, merely a broken shell: the floor of the nave is several feet below the surface of the ground which makes excavation necessary before certainty upon all points can be reached. Further the east end of the north aisle is now part of a private dwelling: the west end of both aisles, where the roofs are preserved, was filled with firewood and hay when we were there, so that it was impossible to take all the measurements we wanted. Humann describes the village as one of the dirtiest and greediest that he had seen: but the people were civil to us, and I should think any one staying there a night or two could with diplomacy obtain entrance to the houses and have the aisles emptied. As it was, there were so many women about that I could only look at the east end in a very perfunctory manner.

At a distance perhaps of twenty metres from the west front and at a much lower level than the ground now heaped up within the church, is a large fragment of pavement with a corner turning towards the building. This must I think be a relic of the former atrium, and probably gives the approximate level of the church. The façade of the west front to which this led is still an imposing mass. Originally there was a central doorway (2.45 m. wide), flanked by two smaller doors on each side (1.94 m. and 1.75 m. respectively): between each door and at both ends of the façade were buttresses, six in all, that is to say, measuring at the base about 1 m.  $\times$  1 m. and rising to the roof. Now, however, there is no trace of the second door at the north side above ground, though the state of the wall still remaining makes us certain of its former existence: and upon the south side there is now a third doorway, but this clearly belongs to a later addition, for the masonry is less evenly faced and it is not "bonded" with the end wall of the original church.<sup>1</sup>

At first these five doors opened into the narthex, the whole church being more than twenty metres from north to south. In front of the doors and still more inside the central entrance, the ground has risen considerably in consequence of the débris fallen from walls and roof. There is no sign of the lintel over the central door, which is perhaps more than half buried. In the direction of the nave the line of a wall is just traceable 7.30 m. from the inside of the western wall: this gives the limit of the narthex. The parts of it opposite the nearer side doors are

<sup>1</sup> This latter addition may have included a xenodochion or a home for the priests, such as we find in some places, or it may have been simply a belfry.

better preserved: the vaulting still remains constructed of large stones laid in parallel courses: it consists, that is, of a series of independent arches simply set side by side.

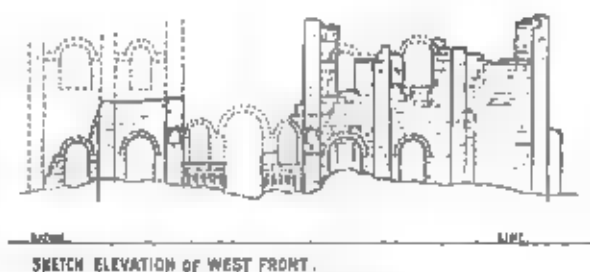
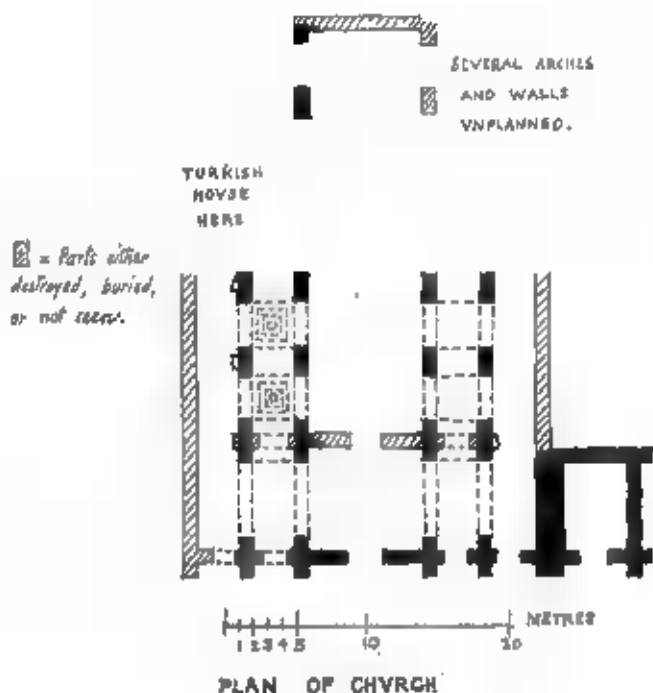


FIG. 5.—PLAN<sup>1</sup> AND ELEVATION.

<sup>1</sup> The plan of the west front is, I think, quite accurate; except for the measurements quoted in the text I cannot guarantee more than approximate correctness for the rest. For the drawing of the elevation I am indebted to my friend Mr. Charles Clark, but I am myself responsible for the few restorations therein suggested. Mr. Clark has, however, represented more of the north door than really exists.

The door leading from the narthex to the nave is now completely underground, but we can follow with ease two bays extending 11.73 m.; then it becomes very difficult to trace the rest, as we have by this time reached the Turkish house upon the north side and the walls have been considerably destroyed or rebuilt. But upon the south side there is at this point a well marked corner, which suggests that the western bays built upon pillars (seen from the aisles) and containing the women's gallery ended here, giving place to some other construction, perhaps with columns or possibly a dome or tower. This change after two bays would bring the ground plan of the church into close connexion with that at Koja Kalessi (Headlam, "Ecclesiastical Sites in Isauria," supplement to the *Hellenic Journal*). Still further east I saw upon the north two smaller arches in the line of the aisle, and upon the south a very complex building, which seemed to belong to the later additions. The last trace of masonry which I found in this direction was nearly thirty m. from the narthex.

The inner aisles as I have said were better preserved: the vaulting remains for at least two bays upon both sides. Here too it is of stone, but not laid as in the narthex: it rises from four arches in four lines parallel to the arches which they leave, terminating in a rectangular keystone: this unribbed quadripartite method is explained by M. Choisy (*L'Art de bâtir chez les Byzantins*, p. 49, fig. 53) as formed by the crossing of two barrel vaults.

The external masonry is very regular, the stones being dressed apparently with a fine comb-pick. In the spring of the westerly arches upon the north aisle bricks are used, laid in very thick beds of mortar. The walls here are very thick to support the weight of the stone vaulting; but the masonry is not so careful as that upon the west front, and it is possible that there were five aisles the whole length of the church. Otherwise the outermost doors of the narthex might have served as entrances to the gallery. From the façade of the church it would appear as if the aisles were externally of the same height as the nave, a peculiarity which is paralleled only (v. Kraus, *Geschichte der Christlicher Kunst*, 1, p. 288) by two Syrian churches at Chakka and Tatkha (de Vogüé, Pl. 15-17).

If by its plan and construction, this church recalls others in Syria and elsewhere, in decorative elements it is in its present state barer than any of these. There are no richly-carved doorposts or lintels, like those at Koja



Kalessi, and the mouldings which remain in their stead and round the windows are coarse and heavy, but it must be remembered that the door of the nave is still invisible and may have been richer than that of the narthex. In fact the only ornaments now remaining are a row of small round arches in low relief upon the west front, about on a level with the original top of the door, and beneath brackets upon the two central buttresses two arches ornamented with zigzags, a combination which of course suggests Romanesque parallels: this decoration recurs, too, in the Phrygian monument country at Ayazin (v. Reber, *Die Phrygischen Felsendenkmäler*, p. 65), and frequently upon late stelai. The spandril of these arches are filled by small crosses, placed upon little columns in relief. There is one capital in the village bearing a monogram, to which I shall





FIG. 6.

refer later: Professor Ramsay tells me that he saw another, and there may be decorated fragments in the cemetery, which we had no time to visit.

Ramsay has brought together most cogent arguments proving, I think decisively, that Yürme is built upon the ancient site of Eudoxias (*Hist. Geog.* p. 225). From the name alone we might conclude that the town had received some favour from Eudoxia, either the mother or daughter of Theodosius II. Eudokia, his wife, is, I think, out of the question: for had she been the eponymous "heroine" of the town, it would have been called Eudokias, whereas the other form is invariably used (v. Notitiae, Councils, etc. collected by Ramsay, *op. cit.* p. 222, also *Life of St. Theodore*, in Greek text of Theophilos Ioannou, Venice, 1884, p. 424, ch. 71).

The first mention of the place is apparently at the Council of 451, which would suit either of the Emperresses of this name, but there is a further

reason which makes the earlier Empress the more probable. "The revolt," [of the German faction] writes Bury (*Hist. of Later Roman Empire*, i. p. 82), "broke out in spring [399 A.D.] as Arcadius and his court were preparing to start for Ancyra in Galatia, whither the Emperor was fond of resorting in summer on account of its pleasant and salubrious climate. The barbarians, recruited by runaway slaves, spread destruction through many provinces, Galatia and Pisidia and Bithynia." What is more natural than to suppose that Eudoxia restored somewhat of the damage wrought in a province thus favoured by the court, and that the people in recognition should have named their city after her? In the building of this church I believe we see the service which thus won the gratitude of the Galatians in this district. If my interpretation of the monogram mentioned above be correct, we have indeed material evidence to prove that this was the case: I propose, that is, to read in the monogram a combination of the common Christ-symbol  with the name of Eudoxia. The letters E. D. O. I. A. are clear enough: the central stroke of the E is larger than the others, this can hardly be merely to preserve a symmetry which is elsewhere disregarded, it must represent the letter E: at the bottom of the upright shaft of the cross we see a letter which looks like an ω rather stunted, but may we not read it also as an inverted T, which gives the last letter required and enables us to read the whole name in a tolerably intelligible system? At the same time I must confess that I have found no other example of an inverted T, and if anyone can suggest some other name which suits the monogram better, I am quite ready to withdraw this interpretation. Upon the other side of the same capital there was a second monogram, wilfully defaced:  was all we could make out.

The church at Yürme then is probably to be referred to the first decade of the fifth century. Syrian parallels have already been quoted, but there is perhaps hardly evidence enough to allow us to speak of Syrian influence. Gunusu Dag, the great mountain south-west of Yürme, is treeless now: it was probably treeless in antiquity. This accounts for one parallelism—the stone vaulting of the aisles. Another parallelism, which separates both from the Roman basilicas, is the substitution of pillars for columns—also due to a material condition, the want of monoliths. But, on the contrary, the use of external buttresses, which gives our façade almost

the appearance of a Greek temple, distinguishes this church, so far as I know, both from Syrian and from Greek Byzantine building. Similar buttresses occur at Perga in the "palaestra of Cornutus" of the first century A.D. (Lanckorowski, *Städte Pamphyliens und Pisidiens*, i. p. 41-44), and again later, though still more sparingly, upon some Seljuk buildings, for instance Lalla Khan, a few hours east of Angora, and Sultan Khan, between Konia and Akserai (for the latter see Sarre, *Reise in Kleinasien*, p. 77, Pl. XXXI.): but they are rare and opposed to the spirit of the Byzantine builders. "La seule tendance commune [to east and west] que j'arrive à saisir est celle-ci: on veut des deux côtés s'affranchir de la sujétion des ouvrages auxiliaires et des installations provisoires." (Choisy, *L'Art de Bâtir chez les Byzantins*, Preface.) As it stands now, the church is bare, cold, unattractive: this too is what one feels in looking through de Vogüé's illustrations. But if we stripped such a gem of fifth century work as the Mausoleum of Galla Placidia at Ravenna of its mosaic decoration, we should have just such an unattractive husk. Already in the early part of this century, as Strzygowski has pointed out, the character of Byzantine architecture was in rapid process of formation: the flat ornament was being substituted for the plastic, the arch for the horizontal entablature. And this we see revealed in the church now before us.

Many buildings once assigned to the sixth century or even later have recently been carried back to the fifth (v. Lethaby and Swainson, *St. Sophia*, p. 198-204), but not one of these offers so close an analogy to our subject in its plainness and utilitarian niggardliness as the church recently excavated above the pool of Siloam and attributed by its discoverers to the Empress Eudokia (Bliss and Dickie, *Excavations at Jerusalem*, p. 181 and foll.). Ingenious in design and rational we may call it, but neither at Siloam nor at Yürme are our eyes charmed by anything which is beautiful or brilliant. Yet be it always remembered that the builders of these works solved problems of which Iktinos had not even dreamed, and for this reason, if for no other, deserve our grateful record.

### III.—ARCHITECTURAL FRAGMENTS FROM YASSI-EUREN.

At the village of Yassieuren and in the neighbouring villages there are extensive remains of a site which we have seen reason to identify with "Crentius" of the Itineraries. Among these are several columns, base-

mouldings, etc., many of them evidently coming from the same building—a church. I made a rough sketch of a capital and dossieret lying in a dark passage in Yassieuren itself.<sup>1</sup> (1) In the next village of Soghuljik I found a second dossieret having the same measurements, 0·85 x 0·70 (2) and a third at Emir Ghazi (3), and two others built into a house at the last named and into the mosque at Bitdik of which only the tops were visible. Of the same material—a yellow limestone(?)—were several columns of suitable size for the capitals, and several pieces of moulding. (4) If we may judge from the other dressed stones lying about, the walls of the church were built of trachyte, giving a combination of colour which is not unpleasant, and seems to foreshadow later Seljuk developments. Capitals and dossierets of this kind are characteristic of the 5th century, before the “Kämpfer” capital of Justinian made a dossieret no longer necessary, as it had been when

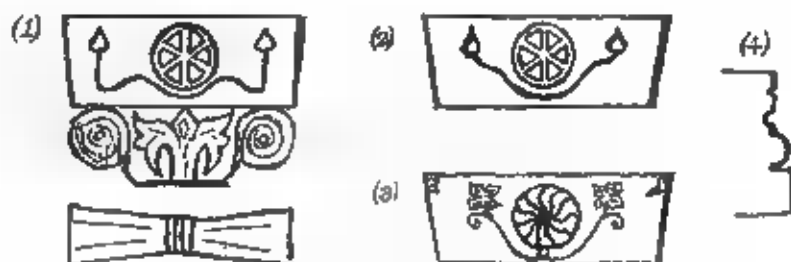


FIG. 7.

the arches pressed with all their weight upon the classical capital with its deep undercutting. (v. Forchheimer and Strzygowski, *Die Byzantinischen Wasser-behälter von Konstantinopel*, p. 208, foll.) But this form also became popular again in the Macedonian period (*op. cit.* p. 227, and the illustrations there referred to); the condition of the country would perhaps favour the earlier date, but the later is not I think historically impossible. As to which of these dates suits these examples best, those who are skilled in these matters must pronounce: Mr. Rodeck tells me that he regards these as certainly belonging to the earlier group. Crentius does not seem to have been a bishopric, but the ruins there were more extensive than those on many more famous sites: indeed if the ground plan of the church were recovered, it would almost be possible to rebuild the whole from the “disjecta membra” now scattered about.

<sup>1</sup> My drawing is so blurred that I cannot be sure of the character of the ends of the volutes.

In this neighbourhood I also saw a type of capital which is common elsewhere, at Kadikeui (Myrika) for example: it is derived apparently from a capital common on Pergamenian buildings, such as the Attalos and Eumenes *Stoas* at Athens and the sanctuary of Athena at Pergamon, formed by the continuation of the shaft flutings into the capital, where they are simply curved outwards and down. (Cf. R. Bohn, *Die Stoa des Attalos* II. 1882. Taf. II, Mittelsäule). In the Phrygian monument country there is an example at Ayazin, published by Prof. von Reber (*Die Phrygischen Felsendenkmäler*, München, 1897, Pl. XII. p. 64), and there compared with rush-leaves—"das Kapital mit den Schilfblattkerben auf dem Kelch." In this district of Asia Minor it generally appears surmounting a double column, or rather two half columns joined together by a square shaft. Near Crenthus also there is a large font, and many carved fragments from a marble Ikonostasis(?) including the common subject of a vase between two birds. The place would in fact repay a prolonged visit.

## KOS ASTYPALAIΑ.

BY DUNCAN MACKENZIE.

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FROM the modern town of Kos, on the site of the ancient capital at the north-east extremity of the island, to the village of Kephalos at the south-west end is a ride of eight hours.

The village<sup>1</sup> stands on a chalky plateau which beyond the isthmus marks the beginning of the mountain district of south-west Kos. This in turn is a repetition on a smaller scale of the mountain region, at the other end of the island, which forms the lofty termination to the long central tableland. The highest points of the mountain district are towards the south-east where the fall to the sea is very rapid. The highest neighbouring peak, Mount Zini, is about an hour distant from the village in a south-easterly direction, while all that lies to the north-west of the main range is high pastoral country with many torrent beds. The whole interval between the village and the steep north slopes of Mount Zini has to be conceived as a vast amphitheatre with steep auditorium overlooking Kamara Bay to the east. The village and the mountain are as side supporting-walls left and right and the projection into the amphitheatre formed by the small plateau, on which stands the little church of Panagia Palatiani, divides the larger auditorium-like hollow into two smaller amphitheatres with a structure of soft yielding chalk and sandstone rock worn down through the action of winter floods into innumerable little ravines.

The spectacle on which one looks from this amphitheatre is one of rare loveliness and interest. Away to eastward are the Knidian Chersonese, the Triopian Promontory, and the site of Ancient Knidos, to the left is the Ceramic Gulf and the high sea-way to Halikarnassos and the north, while

<sup>1</sup> Visited September, 1898.

on the right stretches the chain of islands that form the stepping-stones to Rhodes.

The way from the village passing along the edge of the chalk cliffs over a district of Hellenic chamber tombs curves round into what we may imagine, as the upmost tiers of the amphitheatre. Just before one comes, on the left, to the small plateau, which was mentioned above as dividing the amphitheatre-like hollow into two parts, one sees a torso over life-size and without head, of a veiled, draped, and seated female figure half lying on its right side on the left hand side of the road. The round hollow in the bust shows that the head and neck were a separate piece. The type is that of Rhea-Kybele as finally fixed for later times by Pheidias<sup>1</sup> and a ritual inscription from the neighbourhood in the British Museum shows that the θεὸν μήτηρ (Paton and Hicks, *Inscriptions of Kos*, 402, 6) must have had a cult upon our site.<sup>2</sup> The late date, however, admits the possibility that we have here a dedicatory statue of Agrippina, the wife of Claudius, in the type of the goddess (*ibid.*, inscription 119, 6, and note).

The statue had fallen down from a higher position in a steep hollow above the road to the right. We visited the spot, and this led us into a détour out of the amphitheatre region on to the heights above. Here the villagers in digging ground covered with low scrub during the leisure of winter have occasionally come upon objects that were described as earthenware figures of men and horses, but were probably fragments of stamped archaic reliefs of the 6th century. Further southward, covering broken ground with sandstone rock protruding here and there, were remains of cemented walls covering a large area. These (probably Roman) remains continued on rising ground, beyond some cultivated fields, and here we noticed two ancient olive presses, the one simple, the other double, exactly like one in the Greek fortress above Emporió in Kalymnos.<sup>3</sup>

Higher up to the south-east, on the hill of Skourdoulariés, some late Hellenic tombs lined with sandstone blocks were opened by the proprietor in his field. In the field adjoining to the south, where tombs were also

<sup>1</sup> cf. *Arch. Ztg.* 38, *Taf.* 1, the Kybele-statue of the Mus. Pio Clementino and, with a close resemblance to ours, the headless statue of Rhea in the precinct of the temple of the Magna Mater on the Palatine at Rome.

<sup>2</sup> An archaic terracotta I saw in private possession at Kephalos probably represented a seated Rhea.

<sup>3</sup> The Kalymnos oilpress, together with a plan of the Greek fortress at Emporió, has since been published by W. R. Paton and J. L. Myres, *J.H.S.* 1898, p. 212, fig. 4, and p. 213, fig. 5.

reported, fragments of archaic Greek pottery were to be found lying about. The tomb-region apparently continued for a considerable distance along the pathway, which we had found again, especially on the right-hand side where some opened Greek tombs with some of the slabs still in position were pointed out on this side of some rocky boulders which form a prominent feature in the district.

We returned along the pathway and descended once more into the amphitheatre-like region, now from the south wing. On our way just before we came upon the plateau of Panagia Palatiani we halted at a large fountain, to the right of the pathway, flowing out of the right hand wall of a small quadrangle, open towards the north, into a long trough running along the foot of the other two walls. The quadrangle, with the trough, was constructed out of miscellaneous blocks from some ancient buildings. Noticeable in the middle wall was a large block of grey trachyte of rough grain with an empty metope space between two triglyphs. Most of the other stones looked like blocks from some Greek supporting, or fortification, wall. The fountain square with its northern aspect looks towards the little plateau on which, as already mentioned, is built in the south-east corner the church of the Panagia Palatiani whither we now proceeded.

In the court of the church to the right of the door we noticed the marble block with the inscription, 404, published by Paton and Hicks. The church and the court contain a great many stones from ancient buildings, notably a triglyph like the one at the fountain and an architrave block in the same grey stone. These latter remains point distinctly to some monumental building, probably a temple on the site of which the little church may have been built.

Passing beyond the church to the east we came to the verge of the plateau and saw below us all round a series of terraced plots at different levels. Descending into the first of these plots and turning round in the direction we had come we noticed a strong fortification wall of Hellenistic date running north and south and having corners preserved at the north and south ends. Remains of some building with cement against the outside of this wall could be seen at once to be of much later date. By the discovery of this fortification wall the plateau was defined at once as a kind of acropolis and it was natural to expect continuations. After a few metres the wall that runs westward from the north angle above referred to disappears and after an interval of some more metres\* there appears, fairly



in line with it, a much older wall of polygonal masonry belonging probably to the 7th or 6th century B.C. Below this wall is a level terrace below which again is a declivity with soft rock appearing. Projecting from this declivity in a northerly direction is a piece of wall which is almost certainly early 5th century masonry. This wall does not have the corner preserved, but further west after a short interval appears above the rock declivity a wall with the same masonry, which may be the continuation in a westerly direction of the projecting wall. Still further to the west we noticed a piece of Greek wall of a similar character with a slight change of direction towards the south-west. We have thus encircling the plateau on the east and north sides important looking walls representing at least three periods of construction. The south side of this acropolis is not so well preserved but as the structure of the declivity on this side is more yielding it is probable that much of the wall is hidden under fallen soil. In this direction also many blocks from the acropolis walls were to be seen in the dykes of the cultivated plots below, which were plentifully strewn with pot-sherds of all periods, while the walls of the fountain square almost as certainly tell a similar tale.

On one of the terraces below the plateau to the south-east stands the church of H. Demetrius with many blocks both built into it and lying about it, including the fluted drum of a column in the already mentioned grey trachyte and these may have come from some building on the spot or have been derived from the building indicated on the acropolis itself by the stones of the church there.

There was ample evidence of settlement on the terraces in the amphitheatre-like hollow in the midst of which this acropolis stands; and these continued all the way down to the harbour about a quarter of an hour distant below, where were clear traces of the Roman town and of an ancient mole protecting the harbour on the left against the northern winds that sweep across the low sandy isthmus and the long central plateau.

The tomb-region we had previously visited was now seen to form a wide semicircle inland from the acropolis and town in a way that recalled the much more imposing cemeteries of Kamiros in Rhodes. The fact that the Kybele-statue was found in such close contiguity to the necropolis suggests the further possibility that the goddess may here have been represented as guardian of tombs.<sup>1</sup>

<sup>1</sup> *Bulletin de Correspondance Hellénique*, xiii. p. 558.

With such evidence of an important Greek town on this site we have now to consider the question of identification.

Captain Graves and his officers at the beginning of the forties seem to have noticed the walls of the plateau, as well as the later ruins at the harbour, though he identifies our acropolis with that of Halisarna. Ross, who touched at Kos in 1841,<sup>1</sup> was, through a quarantine imposed by the Turkish officials, prevented from landing, but on having been shown the original drawing of Captain Graves' chart of Kos, he expressed the opinion that Astypalaia should be substituted for the lower town of Halisarna. On a later visit to Kos in 1843 Ross (*ibid.* iii. 136) was, much to his indignation, prevented by the Turkish authorities from visiting this part of the island, and thus, on the basis of the Kephalos inscriptions, is only able to add to his previous conjecture the new one, identifying our acropolis with a town of Isthmos, which would thus be only a few minutes' walk from Astypalaia on the shore. In 1844 Ross at last was able to visit Kephalos, and in identifying the whole of our site with that of Isthmos, no longer finds any room for the Astypalaia which he had previously conjectured near the shore,<sup>2</sup> and he makes only this attempt to get out of the difficulty, that he now places conjecturally the earlier capital of Kos somewhere near the remains of an ancient roadway and harbour westward from Cape Mastikaris, on the north-west coast of Kos. As these remote parts of the island seem to have been but little visited since those days, these conjectures have been left undisputed and unverified; and it only amounts to a further conjectural amendment of Ross when Paton and Hicks (*Inscriptions of Kos*, p. xix.), being probably uneasy about a topography which places Astypalaia at so great a distance as Cape Mastikaris, suppose the earlier capital of Kos to have stood nearer hand at the Isthmos to the west, near Cape Drekanon (Cape Daphni on Paton and Hicks' map).

The following difficulties have to be kept in view:—

1. The existence of the old place-name Stympalia (Στυμπάλαια 'Αστυπάλαια) for at least part of our site requires explanation.
2. Ross himself admits that the name Isthmos for a town of Kos has no warrant outside of the formula *ὁ δᾶμος ὁ Ἰσθμιωτῶν* in the inscriptions.
3. The Kos Astypalaia mentioned by Strabo (p. 657) does not occur in the inscriptions.

The solution which will vindicate the tradition on which the name

<sup>1</sup> *Reisen*, ii. p. 89.

<sup>2</sup> *Ibid.* iv. 23-4.

Stympalia is based, is this: that Isthmos and Astypalaia are one and the same place, and that the people who inhabited the older capital of Kos did not in the inscriptions call themselves by the name of their town but  $\acute{\alpha}\ \delta\acute{\alpha}\mu\omicron\varsigma\ \acute{\alpha}\ \iota\sigma\theta\mu\omega\tau\acute{\alpha}\nu$  (Paton and Hicks, *passim*). We have thus an acropolis with Greek and Roman towns going down to the harbour below it, all of which are parts of one Astypalaia. Besides this a separate town of Isthmos never existed at all. Inscriptions of the Isthmus are thus inscriptions of Kos Astypalaia and the occasional discovery still of inscriptions from our site confirms the testimony of the villagers that those already known are from the same locality, whereas inscriptions telling of ■ Astypalaia near Cape Drekanon or elsewhere are as unknown in Kos as in Paton and Hicks' own pages.

Thus all the evidence furnished in the *Inscriptions of Kos* is in favour of our amended topography; while the authors themselves acknowledge that for the capital to have looked westward from near Cape Drekanon would have been singular; "for the island by nature faces eastward, and for it thus to turn its back on Asia" would certainly have been "to forgo all share in general history." But if the old capital was not on the west coast facing the smaller islands of the southern Cyclades but on the east coast where we place it, facing the Ceramic Gulf and Knidos, then Kos did not forgo all share in general history, and the old capital, like the island itself, lay "on the high road of all maritime traffic between the Dardanelles and Cyprus." It has to be remembered that it was this Kos Astypalaia and not the Kos Meropeis at the north-east end of the island, later the capital, that was important enough to be ■ member of the famous Doric League of the Hexapolis. It would have had a far less chance of holding this position had it faced westward towards the distant Cyclades and turned its back on Asia and the great sister-city on the Triopian Promontory.

## ANNUAL MEETING OF SUBSCRIBERS.

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THE Annual Meeting of Subscribers to the BRITISH SCHOOL AT ATHENS was held in the rooms of the Society of Antiquaries, Burlington House, on October 20th, 1898, the LORD BISHOP OF LONDON in the Chair. The following Report was read by the Hon. Secretary (Mr WILLIAM LORING) on behalf of the Managing Committee :—

The Committee have to report a Session whose results, though less varied in character than those of some of its predecessors, will probably be found to compare favourably in scientific value with any that the School has hitherto obtained. The excavation of the prehistoric site at Phylákopi, in the island of Melos, which is the principal event of the year, has led to the discovery of a vast quantity of pottery (painted and unpainted), as well as many stone implements and such other objects as are usually found on early Greek sites. That the Phylákopi site would prove an important one had been foretold by the late Director, Mr. Cecil Smith, under whose care the excavation was begun in the spring of 1896 and continued in that of 1897. But neither he nor the present Director, Mr. Hogarth, was prepared for the mass of material which the spade has this year brought to light. What makes the site especially important from the scientific point of view is the existence of three clearly-defined settlements of different epochs, represented by superincumbent layers, the proceeds of which have, needless to say, been scrupulously kept apart for purposes of study and comparison.

Mr. Hogarth will give some account of the work at Phylákopi and its results, so far as these can be gauged at present. But a considerable time must necessarily elapse before the mass of pottery now in the National Museum at Athens can be completely examined and adequately published; and even then the interest in Phylákopi will be by no means exhausted, for there appears to be abundant material on the site itself for another season's excavations, which the Committee has already decided to undertake. The Director will be able this afternoon to describe and to exhibit paintings of some characteristic examples of the Phylákopi pottery,

and a remarkable early fresco, of which the colours as well as the design (representing flying-fish) are still well preserved. Some specimens of what may be an early script, though undecipherable with our present knowledge, will also doubtless arouse a special interest in view of Mr. Arthur Evans's recent discoveries of a similar nature in Crete.

The number of students during the past session was seven. Of these, Mr. A. E. Henderson (Gold Medallist and Travelling Student of the Royal Academy) has been wholly occupied in drawing and painting details of Byzantine buildings in Constantinople; and, though unable to fulfil his intention of proceeding thence to Greece for similar work, he has reported to the Committee from time to time, and has derived some practical advantages from his connexion with the School. Of the remaining six students, four are graduates of Oxford and two of Edinburgh, one of the latter (Mr. Mackenzie) having also a Vienna degree. The fact that none of the students were Cambridge men is a purely accidental and (it may be added) a very unusual occurrence. That it betokens no slackening of interest in Cambridge in the work of the School is proved by the facts, that the Senate has this year renewed its grant of £100 from the Worts Fund for a further period of three years, and that both the recently elected Travelling Students of the University (the Craven and Prendergast Students) have been admitted to membership of the School for the coming session, and have already proceeded to Athens.

The re-admission of well-qualified students in successive years, which is becoming very common, may be regarded as one sign of the School's vitality; for students of the second or third year are naturally in a position to derive more profit from their own studies, and to render more assistance in the organized researches of the School, than those admitted for the first time. Of the seven students of last session, two (Mr. Duncan Mackenzie and Mr. C. C. Edgar) were admitted for the third time, and one (Mr. J. W. Crowfoot) for the second time. The first of these (Mr. Mackenzie) had spent the summer of 1897 in a journey among the Cyclades, which, owing to his sympathy with native life, proved fruitful in new archaeological results, especially of the prehistoric period. These results his illness prevented him from working up after his return to Athens in January; but in March he began to mend, and in April he was able to proceed to Melos, and to render excellent service in the excavation of Phylákopi, in the previous exploration of which site, under Mr. Cecil Smith's direction, he had taken an important part. The Committee have secured his services for yet another Session by a grant of £50, without which his continuance in Greek lands would have been impossible. The second (Mr. Edgar, formerly Oxford Craven Fellow), who came on from Rome early in January, devoted himself to the study of early Ceramics, and was thus enabled to render invaluable service later on in sorting and preparing for publication the pottery from Phylákopi. The special knowledge he has thus acquired is felt by the Director to be of so much importance to the School in connexion with the excavation that the Committee has promised him, in the event of his being able to return to Greece for the coming Session, a grant similar to Mr. Mackenzie's. The third re-admitted Student (Mr. Crowfoot, Hulmeian Exhibitioner of Brasenose College) came also

from Rome in the middle of January. Being under arrangement to accompany Mr. J. G. Anderson to Asia Minor in April, he spent his time largely in preparation for that journey. But he was able to do some surveying on the island of Sphacteria; and at the end of March to proceed to Cyprus in order to supervise, on behalf of the British Museum, the excavation of a cemetery near Larnaka. Late in April he went to Smyrna, and in May started with Mr. Anderson for the interior of Asia Minor.

The three new students of whom no account has yet been given, are Mr. W. A. Curtis (Heriot Scholar of Edinburgh University), Mr. A. J. Spilsbury (of Queen's College, Oxford), and Mr. E. B. Hoare (of Magdalen College, Oxford). Mr. Curtis came out in November, and remained in Greece until June, working at first in the Library and the Museums with special reference to ancient Greek dress. Later he travelled in Greece, and finally he attended the excavations at Phylakopi, where he did most of the photographing, and assisted both in supervision and in sorting pottery. Mr. Spilsbury was elected to the Studentship offered to Oxford by the Committee of the School, and came out late in January for three months only. These he spent in studying monuments and travelling in Greece. Mr. Hoare was sent out in April, as Architectural Student, to draw plans, &c., for the excavation in Melos. He both drew the plans, and copied in colours certain of the finds with great care and diligence, in spite of ill health; and he remained at Phylakopi until the close of the work. Thereafter he spent ten days in Athens, and returned to England in the middle of June to work up his drawings. These are now complete.

Besides these gentlemen, Mr. J. G. Anderson, formerly a Student of the School, has been exploring Asia Minor, and Messrs. Arthur Evans and J. L. Myres, Associates, have been exploring Crete. Professor E. A. Gardner, formerly Director, went out in April as an Associate, bringing with him a body of visitors, at whose disposal the library and the services of the staff were placed; and Mr. F. C. Penrose, formerly Director, went in May to advise the Greek Government with regard to the consolidation of the Parthenon. Reference may also be made to Mr. J. G. Frazer's monumental edition of Pausanias, part of the material for which was collected by him as a student of the School. Another old student, Mr. W. J. Woodhouse, has written an important monograph on Aetolia.

Mr. D. G. Hogarth's appointment to the Directorship of the School was mentioned in the last Annual Report. His long-standing acquaintance with the modern Greek language and people gave him exceptional advantages at starting; and the appointment of a Director possessing a wide experience of excavation, when the important site of Phylakopi was on hand, has proved most fortunate. Mr. G. C. Richards, formerly a Student of the School, afterwards Professor of Greek at Cardiff, and now Tutor of Oriel, was appointed for four months to the temporary post of Assistant-Director, and delivered lectures in the museums to students and (at Easter-time) to visitors.

The fabric of the new Students' Hostel, which, by a vote of March 31st last, is to be known in future as the "Macmillan Hostel," was completed before the opening of the Session. It is now almost entirely furnished, and has been in use throughout the year. It is open to all Students and Associates of the School, Students being

required to reside in it except with the special leave of the Committee. The Director has now been authorised to admit other persons, if seriously engaged in study or research, at his discretion. The Committee hope that under these liberal conditions the Hostel may materially promote the objects of the School by making it, even more than hitherto, the meeting ground of scholars and archaeologists; and that at the same time it may become, through the weekly payments of the residents, more nearly self-supporting.

The Hostel appears to have been popular with the Students during the past session; it is well built and comfortably furnished, and its proximity to the Library and to the Director's residence is, of course, a great convenience. Some expenditure upon the surroundings of the Hostel—gates, grounds, &c.—is still required; and a verandah, and possibly additional rooms, may be added in course of time.

The Library, which has grown rapidly during the past few years, has again received large additions; and some 150 volumes have been bound during the year. The catalogue, left in proof by Mr. Cecil Smith, has been revised and brought up to date; and it is again in the printer's hands. The library of the late Mr. Finlay, the historian of Greece, a part of which the Committee hoped, last year, to acquire for the School, was found to be of considerably less pecuniary value than had been currently supposed, and the Committee felt obliged to decline it at the price named by Mr. Finlay's representatives. A lower offer, recently made by the Committee, has not as yet been accepted. The Committee gratefully acknowledge gifts of books from the Syndics of the Cambridge University Press, from members of the Oxford University Press Delegacy, from the Trustees of the British Museum, and from Messrs. Macmillan & Co.

The third number of the "Annual," that for the session 1896-7, has been issued within the last few days. It should be noted that the Phylakopi excavations described in it are those of the year 1897, and not those referred to at the beginning of this report. Several causes have conspired to delay the issue of the third number, and it is hoped that future numbers may be produced more promptly. A preliminary account of the later discoveries at Phylakopi will appear in No. IV., which will (it is hoped) be ready within the next few months.

No. I. of the "Annual," which was originally issued in a slightly different form from later numbers, and only for subscribers, has been reprinted, with the omission of some preliminary matter of little or no interest to the general public, and is now published in a form precisely similar to Nos. II. and III. Thus complete and uniform sets are for the first time obtainable, and the "Annual" may be expected in future to command a ready sale.

The number of members of the Managing Committee to be elected by the subscribers has, by a recent alteration in the rules, been raised from nine to twelve. Professor Percy Gardner and Mr. Arthur Evans, the two leading representatives of archaeology at Oxford, have consented to fill two of the vacant places, if elected for that purpose; and Mr. R. C. Bosanquet, a recent distinguished Student of the School, is nominated for election to the remaining vacancy.

The accounts presented to-day show that the small accumulated capital of the

School has been reduced during the year by about £360. This is due to three items, which may fairly be classed under the head of extraordinary expenditure, viz., the completion of the Hostel building, which exceeded by nearly £200 the special building fund raised last year; the cost of furniture £330; and the reprinting of the first number of the "Annual," referred to above. Against these items must be set an extraordinary receipt amounting to £29, since the postponement of the annual meeting to October, and the consequent extension of the period covered by the accounts, have brought in an additional half-year's income from the invested capital. The Committee are anxious to replace from income as quickly as possible the £360 thus taken, in order that they may have a reserve in hand to meet any similar necessary outlay in the future without having to draw upon their invested capital; and they must therefore press once more the need of further annual subscriptions if the work of the School is not to be curtailed. They must also remind their subscribers that several most important subscriptions were promised for five years only from 1895, and have therefore but two more years to run. They feel that no effort must be spared to maintain the ground which has been won and successfully utilized in the last three years, and confidently appeal to the meeting for their support in this endeavour.

The CHAIRMAN, in moving the adoption of the report, said that it told a story of very considerable work accomplished, and work which carried with it great promise for the future. It would be easy for him simply to move its adoption, but he found on the agenda paper that he was to deliver an address. To give an address on such an occasion was a difficult thing, as he was speaking among experts and had no claim to be considered an expert himself. He would rather address himself to the non-experts who were present. It was for non-experts, it had been said, that public meetings were called, as they gave opportunities for enlisting their sympathy in that most profitable form of all, subscriptions.

He felt that the great importance of the British School at Athens lay in the fact that it was the most conspicuous institution which recognised the study of archaeology—the one of our institutions, in fact, which was engaged in training archaeologists. There was nothing more remarkable in modern study than the place which archaeology was taking in supplying gaps in our knowledge. We had become familiar with the conception of human development; and archaeology was one form of recognition of the fact that man's activities and energies in the past were to be tracked in every sphere, however remote, and to be found in every region. The careful collection of materials for comparative study produced results of immense importance in filling up the hitherto void spaces of human records. Discovery in the present day had filled up the map of the world in a manner which would have surprised our ancestors. In like manner archaeology was engaged in filling up the records of remote ages with astonishing rapidity. It was, therefore, a matter of great moment that those who were engaged in this process should be properly trained. That aim was being fulfilled by the British School at Athens, which was established to supply such training in the place where it could best be



obtained. The work of archaeology was really to abolish the difference between historic and pre-historic times, and the area which lay between them was being swiftly bridged over.

He had recently been reading a writer who, moralising on the trite theme of the futility of human aspirations, asked what reputation survived 100 years. If it did, said this writer, it was simply to become the vehicle of some historian's theories. There was much truth in the observation. Great names too often survived simply to become pegs upon which the historian hung his generalisations; as the perspective changed, human reputations changed, and the records did not afford much help. No doubt we read into the records of the past the prepossessions of the present. But the archaeologist interpreted the record of man's activities in the stones which had survived from past ages. The process went on with marvellous vigour. The collection of materials, the piecing of them together into an intelligible whole, required training in methods of comparison; and the great centre where that training could be accomplished was undoubtedly Greece, where lay the key of the beginning of almost all knowledge, whence was transmitted to us the thoughts of the East, and where those thoughts received definite outline and form. Greece was the starting point not only of our thought, but in large measure of our commerce and enterprise. It was the meeting point between the East and the West, and the place where prehistoric and barbarous things could be seen in the process of moulding into forms common to all civilization. In Greece, therefore, each discovery of archaeology added to our knowledge, and nowhere else could the wonderful course of development in the past be so advantageously studied. The excavations and explorations which had been effected were systematised by archaeology, and in that labour the British School, in common with those of every European nation, was bearing its share.

It was especially gratifying that in connexion with the School there should be such an institution as the Hostel, where students could be housed, thus forming, with the School itself, a centre where even the unlearned traveller might be enabled to make the best use of his visit to Athens. It was our habit to do these things independently of Governments, of which we had a wholesome dread. Private enterprise awakened energy and zeal in a way which was impossible to a mere Government department. We were sometimes apt to grieve that we did not receive so much encouragement from Government as our Continental neighbours. But there was probably on that very account more vitality in the work and a deeper impression on the public mind. Englishmen did things thoroughly, even when they did them by mistake. In the museum at Spalato was a book published by Adams in 1764. Adams was an architect engaged in the study of classical buildings, and desired to examine Diocletian's palace. The result was that he produced a monumental work, whose value had not been impaired by age, yet it was not clear that his own work was made the better by his investigations. Englishmen in a word were like Saul, the son of Kish, who went out to look for his father's asses and found a kingdom.

The motion for the adoption of the Report was seconded by Mr. PENROSE, and carried *nem. con.*

The Director, Mr. HOGARTH, then read his report, in the course of which he expressed the obligations of the School to the Government of his Majesty the King of the Hellenes for the great courtesy shewn by them in the past season, and especially for the generous aid afforded towards a settlement of the difficult negotiation for the Phylákopi site in Melos; to the French School for their sympathetic invitation to the Jubilee *fêtes* held last Easter; and to the directors of the German and American Schools for all kinds of help and advice freely given on many points. He also offered cordial congratulations to the new Austrian School on its birth and prospects.

The relations of the British School with all its neighbours left, he said, nothing to be desired. As to the work of the School, it would be best to define clearly its functions. These were two-fold—education and research. The first divided itself into education in aesthetics and education for research. As a matter of fact the functions of the School were limited—first by its small staff. If the British School was to be an efficient teaching institution it must provide itself with such an organisation as the German School had. It should also be remembered that few men could afford such a luxury as education in Athens. The supply of such students would always be small. The second function, research, was the one which both in theory and practice the school performed best. In fact last year a large majority of the students represented this side. The research might be:—(a) Individual, for which the School provided trained advice, a library, and all possible facilities; but the researchers, mostly graduates of full age, took their salvation into their own hands. Again, their numbers could never be large, owing to want of endowment for long terms of residence abroad—English students not being supported by their Government—and to want of endowments at home for professional chairs, museums, and the like. The School had only a very small and uncertain nucleus of men working at archaeology as a profession. On the increase of this would depend its international reputation. (b) Collective, undertaken by the School as such. This generally took the form of excavation. The scene of action during the past season had been the important prehistoric capital of the island of Melos, discovered at Phylákopi, on the north-east coast, by Ross, and reported on by Dummer. The School began to excavate it in 1896, little suspecting its great importance. It was proving a second Hissarlik, an undisturbed repository of the products of the primitive civilisation of the Aegean from the "Mycenaean" age back to the Neolithic period. Much had been eaten away by the sea, but what was left was equal in extent to Tiryns. Mr. Hogarth had picked up the work where Mr. Cecil Smith left it, and after determining the limits of the city on south and east, and digging test trenches to obtain a relative chronology of the potsherds in which the site was marvellously rich, proceeded to open out the great barrack-like structures on the north and west. Here were remains of three settlements, divided by layers of *dibris*, the middle and lower ones being singularly well preserved. The best rooms were on the higher ground to the west. The blocks were divided by narrow lanes with covered drains down the centre. The depth varied from seven metres to three metres. In the two lower settlements was found a mass

of pottery, and almost as many vessels, complete or but little broken, as in a large cemetery. These covered the whole development of the potters' art up to the fine Mycenaean work. Fabrics, shapes, and decoration were in many cases new. The most notable vase was pipe-shaped and decorated with four scantily-clad figures, bearing fish in either hand. This was about the most interesting primitive Aegean vase in existence. In several rooms painted fresco was found; in one case white and gold lilies on a red ground, in another a beautiful scene of the sea with flying fish and marine growths and a man working a casting net. Of the primitive symbols now attracting so much attention on Cretan stones, &c., over fifty distinct examples were found scratched in clay before baking. Many fine steatite vases, clay lamps (unknown previously on early sites), and other stone utensils and implements came to light. There was a little bronze and bone, but no gold or silver. The site was to be continued next spring and its cemeteries examined. When finished it would rank with Hissarlik, Tiryns, and Mycenae.

The following Resolution was next moved by Sir JOHN EVANS, seconded by Mr. F. W. PERCIVAL, and carried *nem. con.* :—

"That Prof. PELHAM, Dr. WALDSTEIN, and Prof. ERNEST GARDNER be re-elected, and that Prof. PERCY GARDNER, Mr. ARTHUR J. EVANS, and Mr. R. CARR BOSANQUET be elected, Members of the Managing Committee; and that Dr. LEAF be re-elected Hon. Treasurer, Mr. LORINO Hon. Secretary, Lord LINGEN and Sir FREDERICK POLLOCK Auditors."

A Vote of Thanks to the Auditors (moved by Mr. MACMILLAN, and seconded by Prof. LEWIS CAMPBELL), and a Vote of Thanks to the Chairman (moved by the Provost of Oriel, and seconded by Lord LINGEN), brought the proceedings to a close.



## CAPITAL ACCOUNT.

	£	s.	d.		£	s.	d.
Balance from last account . . . . .	2,676	9	8	Library . . . . .	82	19	■
Donations . . . . .	22	2	0	Hostel, balance of building account . . . . .	192	7	6
Balance of Income . . . . .	204	18	8	„ furnishing . . . . .	330	4	10
				Balance down . . . . .	2,297	18	1
	<u>£2,903</u>	<u>10</u>	<u>4</u>		<u>£2,903</u>	<u>10</u>	<u>4</u>

## BALANCE ACCOUNT.

	£	s.	d.		£	s.	d.
Balance of Capital . . . . .	2,297	18	1	Balance at Bank . . . . .	472	9	11
Byzantine Fund . . . . .	55	9	2	India 3% Stock, at par . . . . .	2,000	0	0
Subscription paid in advance . . . . .	20	0	0				
Balance (authorized) owing on annual publication and reprint . . . . .	99	2	8				
	<u>£2,472</u>	<u>9</u>	<u>11</u>		<u>£2,472</u>	<u>9</u>	<u>11</u>

*Examined and found correct, December 19th, 1898.*

LINGEN,  
F. POLLOCK.

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	£	s.	d.
Bosanquet, C. P. B.	5	0	0
Egerton, Sir E.	5	0	0
Johnston, C. E.	10	0	0
Bishop of Richmond.	2	0	0
	<u>£22</u>	<u>2</u>	<u>0</u>

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The University of Oxford	100	0	0
The University of Cambridge	100	0	0
McGill University, Montreal	5	5	0
The Hellenic Society	100	0	0
The Society of Antiquaries	5	5	0
Brasenose College, Oxford	5	0	0
Christ Church, Oxford	20	0	0
Corpus Christi, College, Oxford	5	0	0
King's College, Cambridge	10	0	0
Magdalen College, Oxford	10	0	0
Agnew, Sir W.	2	2	0
Allbutt, Professor T. C.	1	1	0
Austen Leigh, E. C.	1	1	0
Awdry, H.	1	1	0
Bailey, J. C.	5	0	0
Barlow, Dr. T.	1	1	0
Bosanquet, R. C.	1	0	0
Brinton, H.	1	1	0
Brooke, Rev. Stopford	1	1	0
Butcher, Prof.	2	2	0
Butler, Dr.	2	0	0
Buxton, H. E.	1	0	0
Bury, Prof. J. B.	1	1	0
Campbell, Prof. L.	1	1	0
Carlisle, Miss	1	1	0
Carr, Rev. A.	1	1	0
Chawner, W.	2	2	0
Colchester, Lord	5	0	0
Cole, A. C.	2	2	0
Cust, Miss M. A.	1	0	0
Dabis, Miss	2	0	0
Davey, Lord	5	0	0
Davidson, H. O. D.	1	1	0
Donaldson, Rev. S. A.	1	1	0
Earl, A. G.	1	1	0
Egerton, Earl	10	10	0
Elliott, Rev. F.	1	1	0
Eumorfopoulos, N.	1	1	0
Evans, A. J.	10	0	0
Evans, Sir J., K.C.B.	5	0	0
Ewart, Miss	5	0	0
Fletcher, H. M.	1	1	0
Fort, J. A.	1	0	0
Fowler, W. W.	1	1	0
Freshfield, D. W.	10	0	0
Gardner, Prof. Percy	2	2	0
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Hawes, Miss	1	1	0
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Heberden, C. B.	2	2	0
Hereford, Bishop of	1	1	0
Herschell, Lord	5	0	0
Hill, G. F.	1	1	0
Hillingdon, Lord	10	0	0
Hogarth, D. G.	2	0	0
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Carried forward	593	12	0

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Brought forward . . . . .	593	12	0
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Mond, Ludwig . . . . .	100	0	0
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 Harris, A., Esq., Lunefield, Kirkby Lonsdale.  
 Harrison, Miss, LL.D., Newnham College, Cambridge.  
 Hawes, Miss, 89, Oxford Terrace, W.  
 Haworth, Jesse, Esq., Woodside, Bowdon.  
 Hay, C. Anderson, Esq., 127, Harley Street, W.

- Headlam, Walter, Esq., King's College, Cambridge.  
 Heberden, C. B., Esq., Principal of Brasenose College, Oxford.  
 Herbert, The Hon. Auberon, The Old House, Ringwood.  
 Hereford, The Right Rev. The Bishop of, The Palace, Hereford.  
 Hill, G. F., Esq., British Museum, W.C.  
 Hogarth, D. G., Esq., Magdalen College, Oxford.  
 Hornby, The Rev. Dr., Provost of Eton College, Windsor.  
 Howard de Walden, The Dowager Lady, 35, Portland Place, W.  
 Ionides, Const., Esq., 23, Second Avenue, West Brighton.  
 Irving, Sir Henry, Lyceum Theatre, W.C.  
 Iveagh, The Right Hon. Lord, 5, Grosvenor Place, S.W.  
 James, The Rev. H. A., D.D., School House, Rugby.  
 Jebb, Prof. R. C., Litt.D., M.P., Springfield, Cambridge.  
 Jenner, Miss, 39, Addison Road, W.  
 Johnston, C. E., Esq., 23, Queen's Gate Terrace, S.W.  
 Jones, H. Stuart, Esq., Trinity College, Oxford.  
 Kennedy, The Hon. Sir W. R., 94, Westbourne Terrace, W.  
 Kenyon, F. G., Esq., Litt.D., British Museum, W.C.  
 Keser, J., Esq., M.D., 11, Harley Street, W.  
 King, Miss Catherine, Oxton, Birkenhead.  
 Knowles, James, Esq., Queen Anne's Lodge, St. James's Park, S.W.  
 L. J. E., c/o the Rev. Brooke Lambert, Greenwich.  
 Lawrence, Sir Edwin, M.P., 13, Carlton House Terrace, S.W.  
 Lawrence, The Misses, 18, Whitehall Place, S.W.  
 Lawson, Sir E., Bart., *Daily Telegraph*, Fleet Street, E.C.  
 Leaf, Mrs. C. J., Beechwood, Tunbridge Wells.  
 Leaf, Walter, Esq., Litt.D., 6, Sussex Place, Regent's Park, N.W.  
 Lecky, Mrs., 38, Onslow Gardens, S.W.  
 Lewis, Mrs. S. S., Castle-bras, Cambridge.  
 Lewis, T. Hayter, Esq., 12, Kensington Gardens Square, W.  
 Lindley, Miss Julia, 74, Shooter's Hill Road, Blackheath, S.E.  
 Lindley, W., Esq., M.Inst.C.E., 10, Kidbrook Terrace, Blackheath, S.E.  
 Lingen, The Right Hon. Lord, K.C.B., 13, Wetherby Gardens, S.W.  
 Lister, The Right Hon. Lord, P.R.S., 12, Park Crescent, Portland Place, W.  
 Llangattock, The Right Hon. Lord, The Hendre, Monmouth.  
 Lloyd, Miss A. M., Caythorpe Hall, Grantham.  
 Loch, The Right Hon. Lord, G.C.B., G.C.M.G., 23, Lowndes Square, S.W.  
 Loring, Miss, 14, Montagu Street, Portman Square, W.  
 Loring, W., Esq., 2, Haze Court, Temple, E.C.  
 Lubbock, The Right Hon. Sir John, Bart., M.P., F.R.S., High Elms, Farnborough R.S.O.  
 Lucas, Sir Thomas, Bart., 12a, Kensington Palace Gardens, W.  
 Lynch, H. F., Esq., 33, Pont Street, S.W.  
 Macan, R. W., Esq., University College, Oxford.  
 MacLehose, James J., Esq., 61, St. Vincent Street, Glasgow.  
 Macmillan, G. A., Esq., St. Martins Street, W.C.  
 Macmillan, Messrs. & Co., Ltd., St. Martins Street, W.C.  
 Marindin, G. E., Esq., Broomfields, Farnham, Surrey.  
 Markby, A., Esq., Copse Hill, Wimbledon.  
 Mitchell, C. W., Esq., 195, Queen's Gate, S.W.  
 Mocatta, F. D., Esq., 9, Connaught Place, Edgware Road, W.  
 Mond, Ludwig, Esq., F.R.S., 20, Avenue Road, Regent's Park, N.W.  
 Monk, Miss, 4, Cadogan Square, S.W.  
 Monro, D. B., Esq., Provost of Oriel College, Oxford.  
 Monson, His Excellency the Right Hon. Sir E., G.C.B., G.C.M.G., British Embassy, Paris.  
 Montagu, Sir S., Bart., M.P., 12, Kensington Palace Gardens, S.W.  
 Montefiore, C. G., Esq., 12, Portman Square, W.  
 Morley, The Right Hon. The Earl of, 31, Prince's Gardens, S.W.  
 Morley, Howard, Esq., 47, Grosvenor Street, W.  
 Morshead, E. D. A., Esq., Grafton Villa, Winchester.  
 Mumm, A. L., Esq., 4, Hyde Park Street, W.  
 Murray, Messrs. J. & H., 50, Albemarle Street, W.  
 Murray, Prof. G. G. A., The University, Glasgow.  
 Myers, Ernest, Esq., Brackenside, Chislehurst.  
 Mylne, Mrs., 83, Gloucester Terrace, Hyde Park, W.  
 Myres, J. L., Esq., Christchurch, Oxford.  
 Neil, R. A., Esq., Pembroke College, Cambridge.  
 Newman, W. L., Esq., 1, Pittville Lawn, Cheltenham.  
 Oswald, J. W. Gordon, Esq. (of Aigas) Beaulieu, Inverness-shire, N.B.  
 Oulss, W. W., Esq., K.A., 12, Bryanston Square, W.  
 Paton, W. R., Esq., British Post Office, Smyrna.  
 Pears, E., Esq., 2, Rue de la Banque, Constantinople.  
 Pelham, Prof. H. F., President Trinity College, Oxford.  
 Pelham, The Hon. Mrs. Arthur, 16, Duke Street, Manchester Square.

Penrose, F. C., Esq., F.R.S., Colebyfield, Wimbledon, S.W.

Perry, W. C., Esq., 7a, Manchester Square, W.  
Pitt-Rivers, Lieutenant-General, Rushmore, Salisbury.

Plumbe, Rowland, Esq., 13, Fitzroy Square, W.  
Pollock, Sir F., Bart., 48, Great Cumberland Place, W.

Poynter, Sir E. J., P.R.A., 28, Albert Gate, S.W.

Radford, Dr., Sidmouth.

Ralli, Mrs. S., 32, Park Lane, W.

Ralli, P., Esq., 17, Belgrave Square, W.

Ralli, Stephen, Esq., 25, Finsbury Circus, E.C.

Rathbone, Mrs., Woodgate, Sutton-Coldfield.

Rawlinson, W. G., Esq., 134, Cheapside, E.C.

Reid, Prof. J. S., Litt.D., Caius College, Cambridge.

Rendall, The Rev. G. H., Litt.D., Charterhouse, Godalming.

Richards, H. P., Esq., Wadham College, Oxford.  
Richmond, The Right Rev. The Bishop of, the Rectory, Stanhope, R.S.O. Co. Durham.

Robb, Mrs., 46, Rutland Gate, S.W.

Roberts, Prof. W. Rhys, University College, Bangor.

Robertson, Charles, Esq., Redfern, Colinton Road, Edinburgh.

Romanes, Mrs., 18, Cornwall Terrace, Regent's Park, N.W.

Rosebery, The Right Hon. the Earl of, K.G., The Durdans, Hippon.

Rothschild, The Right Hon. Lord, 148, Piccadilly, W.

Rothschild, Messrs. N. M. and Sons, New Court, E.C.

Rothschild, The Hon. Walter, 148, Piccadilly, W.

Rumbold, His Excellency Sir Horace, Bart., G.C.B., British Embassy, Vienna.

Salisbury, The Most Hon. the Marquis of, K.G., Arlington Street, W.

Sandys, J. E., Esq., Litt.D., St. John's College, Cambridge.

Seamster, The Right Hon. Lord de, Shrubland Park, Coddensham, Suffolk.

Scott, C. P., Esq., The Firs, Fallowfield, Manchester.

Seaman, Owen, Esq., Tower House, Putney, S.W.

Searle, G. von U., Esq., 30, Edith Road, W. Kensington.

Sharkey, J. A., Esq., Christ's College, Cambridge.

Sidgwick, Prof. H., Litt.D., Newnham College, Cambridge.

Smith, Cecil H., Esq., LL.D., British Museum, W.C.

Smith, Mrs. C. H., 18, Earl's Terrace, Kensington, W.

Smith, J. G., Esq., 4, Wilton Street, Grosvenor Place, S.W.

Smith, R. A. H. Bickford, Esq., 98, Palace Gardens Terrace, W.

Southwell, The Right Rev. the Bishop of, Thurgarton Priory, Notts.

Spring-Rice, S. E., C.B., Treasury, Whitehall, S.W.

Stannus, Hugh, Esq., 61, Larkhall Rise, Clapham, S.W.

Stanton, C. H., Esq., Field Place, Stroud.

Steinkopff, E., Esq., 47, Berkeley Square, W.

Stevenson, Miss E. C., 13, Randolph Crescent, Edinburgh.

Sullivan, John, Esq., Reform Club, Pall Mall, S.W.

Swanwick, Miss A., 23, Cumberland Terrace, Regent's Park, N.W.

Tadema, L. Alma, Esq., R.A., 17, Grove End Road, N.W.

Tancock, The Rev. C. C., The School, Tonbridge.

Taylor, The Rev. Dr., Master of St. John's College, Cambridge.

Taylor, J. E., Esq., 20, Kensington Palace Gardens, W.

Teale, J. Pridgin, Esq., F.R.S., 38, Cookridge Street, Leeds.

Thompson, Sir E. M., K.C.B., British Museum, W.C.

Thompson, Sir Henry, Bart., 35, Winpole Street, W.

Thompson, H. V., Esq., 26a, Bryanston Square, W.

Thursfield, J. R., Esq., Fryth, Great Berkhamstead.

Tozer, The Rev. H. F., 18, Norham Gardens, Oxford.

Tuckett, F. F., Esq., Frenchay, Bristol.

Vardy, The Rev. A. R., King Edward's School, Birmingham.

Vaughan, H., Esq., 28, Cumberland Terrace, Regent's Park, N.W.

Vaughan, E. L., Esq., Eton College.

Verrall, A. W., Esq., Litt.D., Selwyn Gardens, Cambridge.

Waldstein, Prof. Charles, Litt.D., King's College, Cambridge.

Wadsworth, The Right Hon. Lord, 10, Great Stanhope Street, W.

Wantage, The Lady, 2, Carlton Gardens, S.W.

Ward, John, Esq., F.S.A., Lennoxvale, Belfast.

Warr, Prof. G. C., 16, Earl's Terrace, Kensington, W.

Warre, The Rev. E., D.D., Eton College, Windsor.

Warren, T. H., Esq., President of Magdalen College, Oxford.

Waterhouse, Mrs. E., 13, Hyde Park Street, W.

Weber, Dr. H., 10, Grosvenor Street, W.

Wedgwood, G., Esq., Idle Rocks, Stone, Staff.

Wells, J., Esq., Wadham College, Oxford.

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| <p>Wernher, Julius, Esq., 38a, Porchester Terrace,<br/>W.</p> <p>West, H. H., Esq., c/o R. W. West, Esq., Casa<br/>Bianca, Alassio, N. Italy.</p> <p>Westlake, Mrs., 3, Chelsea Embankment, S.W.</p> <p>Whateley, A. P., Esq., 4, Southwick Crescent,<br/>W.</p> <p>Wickham, The Very Rev. E. C., The Deanery,<br/>Lincoln.</p> <p>Wilson, R. D., Esq., 38, Upper Brook Street, W.</p> <p>Wimborne, The Right Hon. Lord, 12, Arlington<br/>Street, S.W.</p> | <p>Winkworth, Mrs., Holly Lodge, Camden Hill, W.</p> <p>Woodhouse, W. J., Esq., 1, Garfield Terrace,<br/>Garth Road, Bangor.</p> <p>Wroth, Warwick, Esq., British Museum, W.C.</p> <p>Yates, Rev. S. A. Thompson, 43, Phillimore<br/>Gardens, W.</p> <p>Yorke, V. W., Esq., Forthampton Court, Tewkes-<br/>bury.</p> <p>Yule, Miss A., Turradale House, Ross-shire,<br/>Scotland.</p> |
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## DIRECTORS OF THE SCHOOL.

1886—1898.

F. C. PENROSE, F.R.S., 1886—1887.

ERNEST A. GARDNER, M.A., 1887—1895.

CECIL H. SMITH, LL.D., 1895—1897.

DAVID G. HOGARTH, M.A., 1897—1898.

## STUDENTS OF THE SCHOOL.

1886—1898.

Ernest A. Gardner,	Formerly Fellow of Gonville and Caius College, Cambridge, and Craven University Student. Admitted 1886—87. Director of the School, 1887—1895. Yates Professor of Archaeology at University College, London.
David G. Hogarth,	Fellow and formerly Tutor of Magdalen College, Oxford, and Craven University Fellow. Director of the School since 1897. Admitted as a Student, 1886—87. Re-admitted (for work in Cyprus) 1887—88.
Rupert Clarke,	Exeter College, Oxford. Admitted 1886—87.
F. H. H. Guillemard,	Gonville and Caius College, Cambridge. First University Reader in Geography. Admitted (for work in Cyprus) 1887—88.
Montague R. James,	Fellow of King's College, Cambridge; Director of the Fitzwilliam Museum. Admitted (for work in Cyprus) 1887—88, with grant of £100 from the University.
R. Elsey Smith,	Appointed to Studentship by Royal Institute of British Architects. Architect to excavations at Paphos, in Cyprus, 1887—88.
Robert Weir Schultz,	Admitted as Travelling Student and Gold Medallist of the Royal Academy, 1887—88. Re-admitted 1888—89, 1889—90. Worked on Greek mouldings and on Byzantine architecture. Made the architectural report on the excavations at Megalopolis.
Sidney H. Barnsley,	Admitted as Student of the Royal Academy, 1887—88. Re-admitted 1889—90, 1890—91. Worked on Greek mouldings and Byzantine architecture.
J. A. R. Munro,	Fellow of Lincoln College, Oxford. Admitted (for work in Cyprus) 1888—89. Re-admitted (for same purpose) 1889—90.

- H. Arnold Tubbs, Pembroke College, Oxford; Craven University Fellow. Now Professor of Classics in the University of Auckland. Admitted (for work in Cyprus) 1888-89. Re-admitted (for same purpose) 1889-90.
- James G. Frazer, Fellow of Trinity College, Cambridge. Admitted 1889-90, with grant of £100 from the University of Cambridge to collect material for commentary on Pausanias.
- William Loring, Examiner in the Education Department and late Fellow of King's College, Cambridge. Appointed to Cambridge Studentship given by the Managing Committee, 1889-90. Re-admitted as Craven University Student, 1890-91, 1891-92, and 1892-93. Assisted in excavations at Megalopolis, and worked at Peloponnesian topography.
- W. J. Woodhouse, Queen's College, Oxford. Appointed to Oxford Studentship given by the Managing Committee, 1889-90. Re-admitted as Craven University Fellow, 1891-92 and 1892-93. Assisted in excavations at Megalopolis, and worked at topography, especially that of Ætolia.
- G. C. Richards, Lecturer at Oriel College, Oxford; formerly Fellow of Hertford College; and late Professor of Greek at University College, Cardiff. Admitted as Craven University Fellow, 1889-90. Re-admitted 1890-91. Assisted in excavations at Megalopolis, and worked in Athenian Museums.
- O. H. Parry, Magdalen College, Oxford. Admitted 1889-90. Worked in Athenian Museums.
- J. R. Stainer, Magdalen College, Oxford. Admitted 1889-90. Worked in Athenian Museums.
- R. A. H. Bickford-Smith, Trinity College, Cambridge. Admitted 1889-90.
- A. G. Bather, Fellow of King's College, Cambridge, and Assistant Master at Winchester College. Admitted 1889-90. Re-admitted 1891-92, on appointment to the Cambridge Studentship given by the Managing Committee; 1892-93 as Prendergast Greek Student; and again, 1893-94, as Cambridge Student. Studied and arranged bronze fragments in the Acropolis Museum, and also assisted in excavations at Megalopolis, Kyparissia, and Abae.
- E. E. Sikes, Fellow and Lecturer of St. John's College, Cambridge. Appointed to Cambridge Studentship given by the Managing Committee out of the Newton Testimonial Fund, 1890-91. Worked in Athenian Museums.
- G. Milne, Corpus Christi College, Oxford. Examiner in the Education Department. Appointed to Oxford Studentship given by the Managing Committee out of the Newton Testimonial Fund, 1890-91. Assisted in excavations at Megalopolis.
- H. Stuart Jones, Fellow of Trinity College, Oxford. Admitted as Craven University Fellow, 1890-91. Re-admitted 1892-93. Worked, chiefly on Greek vases, in Athenian Museums.
- Miss Eugénie Sellers, Admitted 1890-91. Worked in Athenian Museums. Translated and edited (1895) Furtwängler's "Meisterwerke der Griechischen Plastik."
- F. B. Baker, Christ's College, Cambridge. Assistant Master at Malvern College. Admitted 1891-92, with grant from the Craven Fund at Cambridge. Studied coins in the Museum at Athens.

- C. C. Inge, Magdalen College, Oxford. Appointed 1891-92 to the Oxford Studentship given by the Managing Committee. Assisted in the excavations at Megalopolis.
- E. F. Benson, King's College, Cambridge. Admitted 1891-92, with grant of £100 from the Worts Fund ■ Cambridge; 1892-93 on appointment to the Cambridge Studentship given by the Managing Committee; 1893-94 as Craven Student; and 1894-95 as Prendergast Student. Assisted in excavations at Megalopolis and Aegosthena, worked at the plan of the Asclepieion, and took part in the excavations of the Egypt Exploration Fund at Alexandria.
- J. G. Smith, Magdalen College, Oxford. Admitted 1891-92. Re-admitted 1895-96. Assisted in collection of topographical passages.
- V. W. Yorke, Fellow of King's College, Cambridge. Admitted 1892-93, re-admitted 1893-94. Worked at the Niké bastion, and assisted in excavations at Kyparissia and Abae.
- J. L. Myers, Student of Christ Church, and late Fellow of Magdalen College, Oxford. Admitted 1892-93. Re-admitted 1893-94, and 1894-95 as Craven Fellow. Worked in Athenian Museums, excavated tumuli near Kará, and travelled in Asia Minor, Cyprus, and Crete. Compiled a catalogue of the Cyprus Museum.
- R. J. G. Mayor, Fellow of King's College, Cambridge, and Examiner in the Education Department. Admitted 1892-93. Worked in Athenian Museums, and assisted in excavations at Aegosthena.
- R. Carr Bosanquet, Trinity College, Cambridge. Admitted 1892-93. Re-admitted as Craven University Student 1894-95, 1895-96, and 1896-97. Worked in Athenian Museums, and assisted in excavations at Aegosthena, Athens, and Melos.
- J. M. Cheetham, Christ Church, Oxford. Admitted on appointment to the Oxford Studentship, given by the Managing Committee, 1892-93, but after a month's residence was obliged, for private reasons, to resign the studentship and return to England.
- E. R. Bevan, New College, Oxford. Admitted 1893-94. Worked in Athenian Museums. Re-admitted 1894-95, and took part in the excavations of the Egypt Exploration Fund at Alexandria.
- A. F. Findlay, Sent out from Aberdeen by the United Presbyterian Church of Scotland. Admitted 1894-95. Worked at *N.T.* criticism and antiquities, and Modern Greek; attended the University; made a special study of the question of St. Paul and the Arcopagus.
- T. Duncan, Sent out from Aberdeen by the Church of Scotland. Admitted 1894-95. Worked at Modern Greek and Egyptian antiquities. Afterwards joined Prof. Flinders Petrie in Egypt, and thence proceeded to Palestine.
- J. E. Brooks, St. Peter's College, Cambridge. Admitted 1894-95. Re-admitted as associate 1896-97. Worked at antiquities, and Modern Greek.
- H. Awdry, New College, Oxford. Assistant Master at Wellington

- College. Admitted 1894-95. Studied antiquities with a view to school work; and made special studies of military topography.
- Duncan Mackenzie, Of the University of Edinburgh, where he formerly held a Travelling Studentship; Graduate of the University of Vienna. Admitted 1895-96. Re-admitted 1896-97 and 1897-98. Assisted in the excavations in Athens and Melos, travelled and explored among the Cyclades, and worked in Athenian Museums and at the collection of topographical passages.
- Archibald Paterson, Of the University of Edinburgh. Admitted 1895-96. Worked at Christian antiquities and attended the University.
- Charles R. R. Clark, Appointed (1895-96), and re-appointed 1896-97 by the Managing Committee to an Architectural Studentship, in order to take part in all excavations conducted by the School. Prepared plans and drawings of the excavations in Athens and Melos, and assisted in supervising the building of the Hostel.
- C. C. Edgar, Oriel College, Oxford. Admitted 1895-96, and re-admitted 1896-97 (as Craven University Fellow), and 1897-98. Worked at Greek sculpture and vase-painting, and assisted in the excavations in Athens and Melos. Assisted in the reorganisation of the Library, and the preparation of the Library Catalogue, and in the collection of topographical passages.
- F. R. Earp, Fellow of King's College, Cambridge. Admitted 1896-97. Studied Greek Painting at Pompeii and Naples; was prevented by ill-health from proceeding to Athens.
- F. A. C. Morrison, Jesus College, Cambridge. Admitted (as Prendergast Greek Student) 1896-97. Worked in Athenian Museums.
- H. H. West, Trinity College, Cambridge. Admitted 1896-97. Worked at collection of topographical passages, and assisted in excavations at Athens and Melos.
- Miss C. A. Hutton, Of Girton College, Cambridge. Admitted 1896-97. Worked (principally at terra-cottas) in Athenian Museums, and in the collection of topographical passages.
- Pieter Rodeck, Admitted 1896-97 as Travelling Student and Gold Medallist of the Royal Academy. Worked at Ionic and Byzantine Architecture, and assisted in the excavations at Athens and Melos, and in supervising the building of the Hostel.
- J. G. C. Anderson, Christ Church, Oxford. Admitted (as Craven University Fellow) 1896-97. Worked at epigraphy, assisted in the excavations in Athens, and travelled in Asia Minor.
- J. W. Crowfoot, Hulmean Exhibitioner of Brasenose College, Oxford. Admitted, on appointment to the Oxford Studentship given by the Managing Committee, 1896-97. Re-admitted 1897-98. Worked at Greek Portraiture, assisted in the excavations in Athens and Melos, supervised British Museum excavations in Cyprus, and travelled in Asia Minor.
- W. W. Reid, Of the Universities of Aberdeen and Edinburgh. Admitted, as holder of Blackie Travelling Scholarship, 1896-97. Worked at Modern Greek, and proceeded to Asia Minor and Cyprus. Assisted in the excavations at Athens.



A. E. Henderson,	Gold Medallist and Travelling Student of the Royal Academy. Admitted 1897-98. Was occupied throughout the Session in making drawings and paintings of Byzantine buildings in Constantinople.
W. A. Curtis,	Heriot Scholar of Edinburgh University. Admitted 1897-98. Studied in the Athenian Museums, and assisted in the excavations in Melos.
A. J. Spilisbury,	Queen's College, Oxford. Admitted 1897-98, on appointment to the Oxford Studentship given by the Managing Committee. Studied and travelled in Greece.
E. B. Hoare,	Magdalen College, Oxford. Admitted 1897-98, as Architectural Student. Made plans and drawings in connection with the excavations in Melos.

## ASSOCIATES OF THE SCHOOL.

### 1895-1896.

Professor J. B. Bury,	Trinity College, Dublin.
Rev. A. H. Cruickshank,	The College, Winchester.
Arthur J. Evans,	Keeper of the Ashmolean Museum, Oxford.

### 1896-1897.

Ambrose Poynter,	Worked at subject of Mosaic.
J. E. Brooks,	A former Student of the School.
J. L. Myres,	Student of Christ Church, Oxford; a former Student of the School.

### 1897-1898.

Professor E. A. Gardner,	Formerly Director of the School.
Arthur J. Evans,	Keeper of the Ashmolean Museum, Oxford.
J. L. Myres,	Student of Christ Church, Oxford; a former Student of the School.

# RULES AND REGULATIONS

OF THE

## BRITISH SCHOOL AT ATHENS.

### OBJECTS OF THE SCHOOL.

I. The first aim of the School shall be to promote the study of Greek archaeology in all its departments. Among these shall be (i) the study of Greek art and architecture in their remains of every period; (ii) the study of inscriptions; (iii) the exploration of ancient sites; (iv) the tracing of ancient roads and routes of traffic.

II. Besides being a School of Archaeology, it shall be also, in the most comprehensive sense, a School of Classical Studies. Every period of the Greek language and literature, from the earliest age to the present day, shall be considered as coming within the province of the School.

III. The School shall also be a centre at which information can be obtained and books consulted by British travellers in Greece.

IV. For these purposes a Library shall be formed and maintained of archaeological and other suitable books, including maps, plans, and photographs.

### THE SUBSCRIBERS.

V. The following shall be considered as Subscribers to the School:—

- (1) Donors of £10 and upwards.
- (2) Annual Subscribers of £1 and upwards during the period of their subscription.
- (3) Corporate bodies subscribing £50 at one time or £5 annually.

VI. A corporate body subscribing not less than £50 a year, for a term of years, shall, during that term, have the right to nominate a member of the Managing Committee.

VII. A meeting of Subscribers shall be held in October of each year, at which each Subscriber shall have one vote. A subscribing corporate body may send a representative. At this meeting a report from the Managing Committee shall be presented, including a financial statement and selections from the reports of the Director and Students for the season. At this meeting shall also be annually elected or re-elected the Treasurer and the Secretary of the School, two Auditors, and four members of the Managing Committee, in place of those retiring, under Rule XIII. (3).

VIII. Special meetings of Subscribers may, if necessary, be summoned by the Managing Committee.

IX. Subscribers shall be entitled to receive a copy of any reports that may be published by the School, to use the Library, and to attend the public meetings of the School, whenever they may be in Athens.

### THE TRUSTEES.

X. The property of the School shall be vested in three Trustees, who shall be appointed for life, except as hereinafter provided. Vacancies in the number of Trustees shall be filled up at the annual meeting of the Subscribers.

XI. In the event of a Trustee becoming unfit, or incapable of acting, he may be removed from his office by a majority of three-fourths of those present at a special meeting of Subscribers summoned by the Managing Committee for that purpose, and another Trustee shall by the same majority be appointed in his place.

XII. In the event of the death or resignation of a Trustee occurring between two annual meetings, the Managing Committee shall have the power of nominating another Trustee to act in his place until the next annual meeting.

### THE MANAGING COMMITTEE.

XIII. The Managing Committee shall consist of the following:—

- (1) The Trustees of the School.
- (2) The Treasurer and Secretary of the School.
- (3) Twelve Members elected by the Subscribers at the annual meetings. Of these, four shall retire in each year, at first by lot, afterwards by rotation. Members retiring are eligible for re-election.
- (4) The members nominated by corporate bodies under Article VI.

XIV. The Committee shall have control of all the affairs of the School, and shall decide any dispute that may arise between the Director and Students. They shall have power to deprive any Student of the use of the school-building.

XV. The Committee shall meet as a rule once in every two months; but the Secretary or Treasurer may, with the approval of two members of the Committee, summon a special meeting when necessary.

XVI. Due notice of every meeting shall be sent to each member of the Committee by a summons signed by the Secretary. Three members of the Committee shall be a quorum.

XVII. In case of an equality of votes, the Chairman shall have a second or casting vote.

XVIII. In the event of vacancies occurring among the officers or on the Committee between the annual elections, they may be provisionally filled up by the Committee until the next annual meeting.

#### STUDENTS AND ASSOCIATES.

XIX. The Students shall consist of the following:—

- (1) Holders of travelling fellowships, studentships, or scholarships at any University of the United Kingdom or of the British Colonies.
- (2) Travelling Students sent out by the Royal Academy, the Royal Institute of British Architects, or other similar bodies.
- (3) Other persons who shall satisfy the Managing Committee that they are duly qualified to be admitted to the privileges of the School.

No person shall be admitted as a Student who does not intend to reside at least three months in Greek lands.

XX. Students attached to the School will be expected to pursue some definite course of study or research in a department of Hellenic studies, and to write in each season a report upon their work. Such reports shall be submitted to the Director, shall by him be forwarded to the Managing Committee, and may be published by the Committee if and as they think proper.

XXI. Intending Students are required to apply to the Secretary. They will be regarded as Students from the date of their admission by the Committee to the 31st day of October next following; but any Student admitted between July 1st and October 31st in any year shall continue to be regarded as a Student until October 31st of the following year.

XXII. The Managing Committee may elect as Associates of the School any persons actively engaged in study or exploration in Greek lands; and may also elect as honorary members such persons as they may from time to time think desirable.

XXIII. Students, Associates, and honorary members, shall have a right to use the Library of the School, and to attend the lectures given in connexion with the School, free of charge.

XXIV. Students shall be expected to reside in the Hostel provided for them, except with the sanction of the Managing Committee. Priority of claim to accommodation in the Hostel shall be determined by the Committee.

#### THE DIRECTOR.

XXV. The Director shall be appointed by the Managing Committee, on terms which shall be agreed upon at the time, for a period of not more than three years. He shall be eligible for re-election.

XXVI. He shall have possession of the school-building as a dwelling-house; but Students of the School shall have a right to the use of the Library at all reasonable times.

XXVII. It shall be his duty (1) to guide and assist the studies of Students and Associates of the School, affording them all the aid in his power, and also to see that reports are duly furnished by Students, in accordance with Rule XX.; and placed in the hands of the Secretary before the end of June; (2) to act as Editor of the School Annual.

XXVIII. (a) Public Meetings of the School shall be held in Athens during the season, at which the Director and Students of the School shall read papers on some subject of study or research, and make reports on the work undertaken by the School. (b) The Director shall deliver lectures to Students of the School. At least six of such meetings and lectures shall be held in the course of each session.

XXIX. He may at his discretion allow persons, not Students of the School, to use the Library and attend his lectures.

XXX. He shall be resident at Athens from the beginning of November in each year to the end of the following June, but shall be at liberty to absent himself for short periods for purposes of exploration or research.

XXXI. At the end of each season he shall report to the Managing Committee—(i) on the studies pursued during the season by himself and by each Student; (ii) on the state of the School-premises and the repairs needed for them; (iii) on the state of the Library and the purchases of books, &c., which he may think desirable; and (iv) on any other matter affecting the interests of the School.

XXXII. In case of misconduct the Director may be removed from his office by the Managing Committee by a majority of three-fourths of those present at a meeting specially summoned for the purpose. Of such meeting at least a fortnight's notice shall be given.

## RULES FOR THE MACMILLAN HOSTEL.

XXXIII. The Hostel shall be managed by the Students for the time being, subject to the control of the Director.

XXXIV. The Director shall have power to exclude a Student from the Hostel in case of misconduct; but such exclusion must be immediately reported to the Managing Committee.

XXXV. The Students shall, until further notice, pay a fixed charge of 15 drachmas (paper) a week for their rooms, this payment to include fire and lighting.

XXXVI. Associates of the School, members of the Committee, and ex-directors, may be admitted to residence in the Hostel. Other persons, if seriously engaged in study or research, may be admitted by the Director at his discretion. But no person shall reside in the Hostel under this rule to the exclusion of any Student desiring admission.

XXXVII. The weekly charge for residents other than Students shall be 30 drachmas (paper) until further notice.

XXXVIII. The Committee shall provide a butler (who can act as caretaker while the School is closed), the residents providing such further service as may be necessary.

XXXIX. The Director shall draw up further rules for the internal management of the Hostel; such rules to be subject to the approval of the Managing Committee.

## RULES FOR THE LIBRARY.

XL. The Director shall have power to make rules for the management of the Library, its use by Students, and the like; such rules to be subject to the approval of the Managing Committee.

## PUBLICATION.

XLI. No publication whatever, respecting the work of the School, shall be made without the previous approval of the Committee.

## THE FINANCES.

XLII. All money received on behalf of the School beyond what is required for current expenses shall be invested in the names and to the discretion of the Trustees.

XLIII. The banking account of the School shall be placed in the names of the Treasurer and Secretary, who shall sign cheques jointly.

XLIV. The first claim on the revenue of the School shall be the maintenance and repair of the School-building, and the payment of rates, taxes, and insurance.

XLV. The second claim shall be the salary of the Director, as arranged between him and the Managing Committee.

XLVI. In case of there being a surplus, a sum shall be annually devoted to the maintenance of the Library of the School and to the publication of a report; and a fund shall be formed from which grants may be made for travelling and excavation.

*Revised to December, 1898.*

## MANAGING COMMITTEE, 1898—1899.

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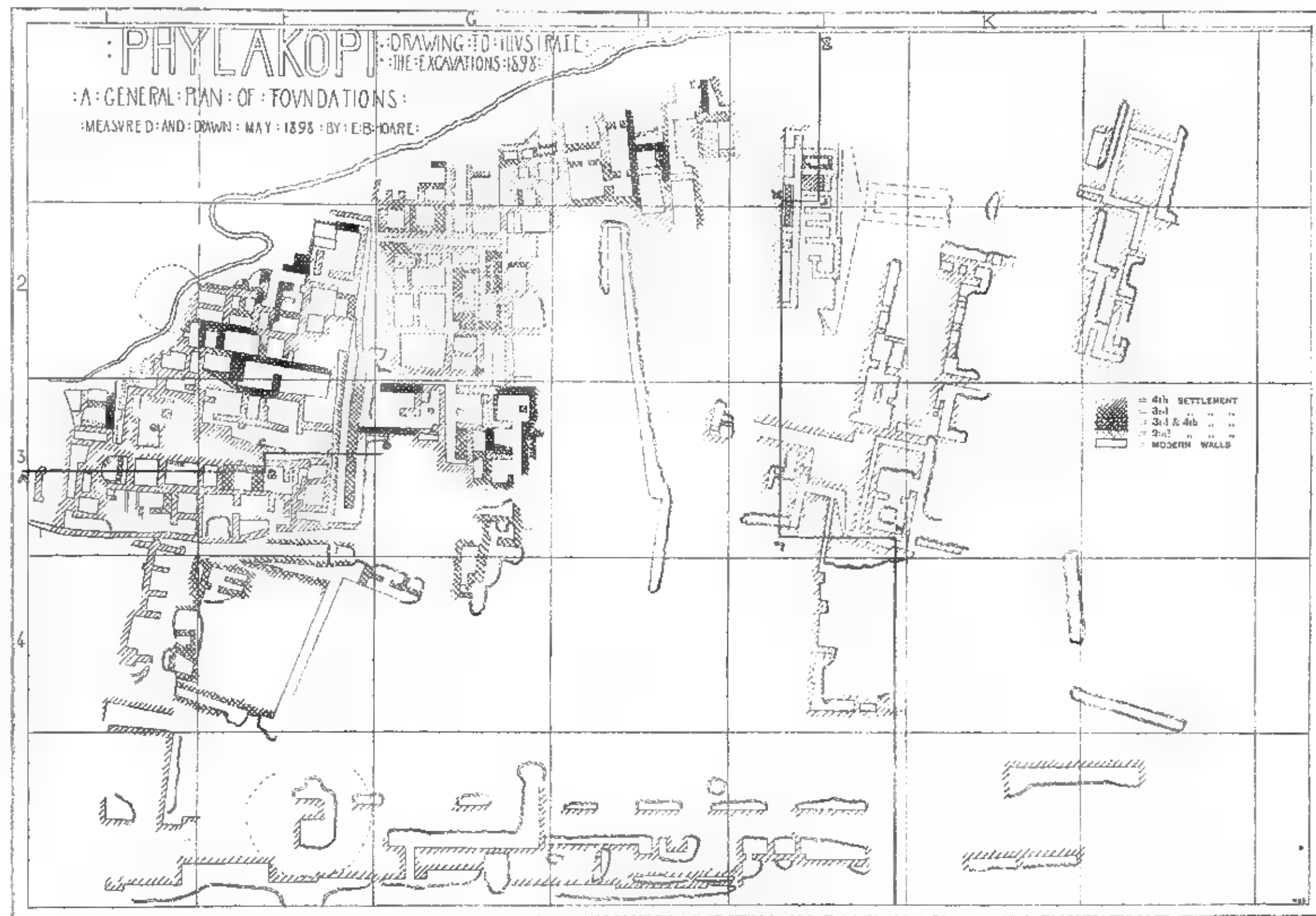
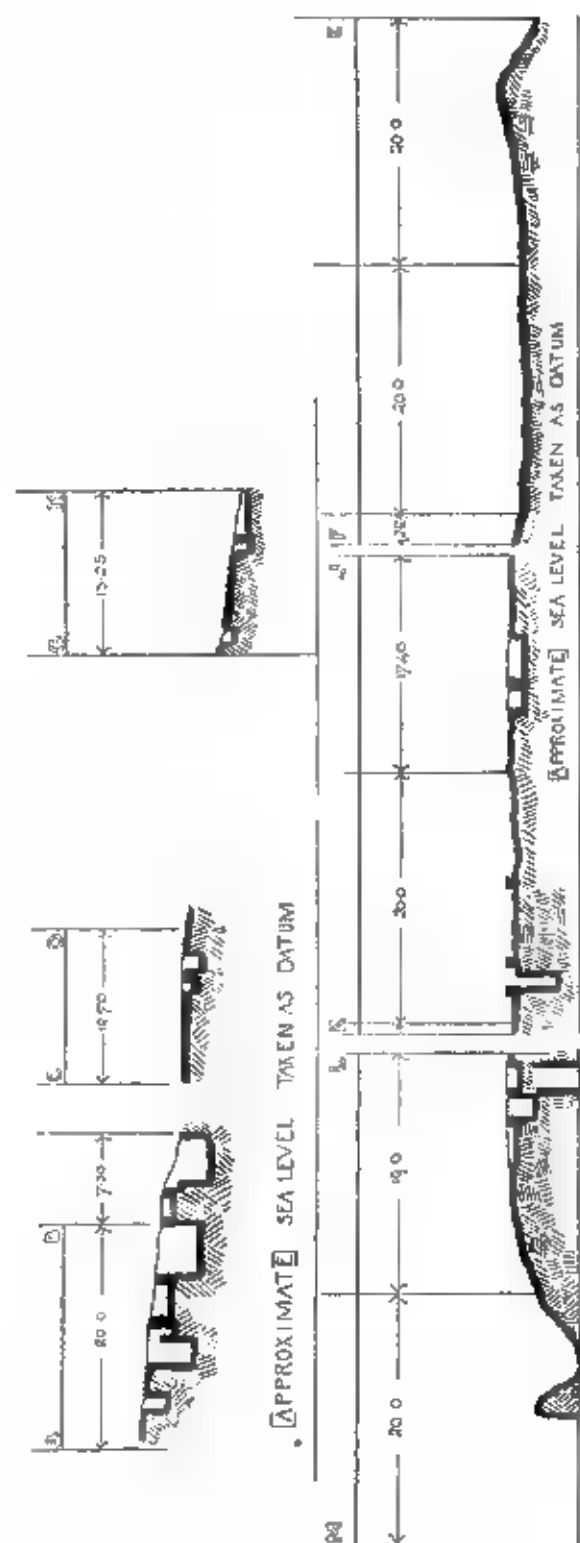
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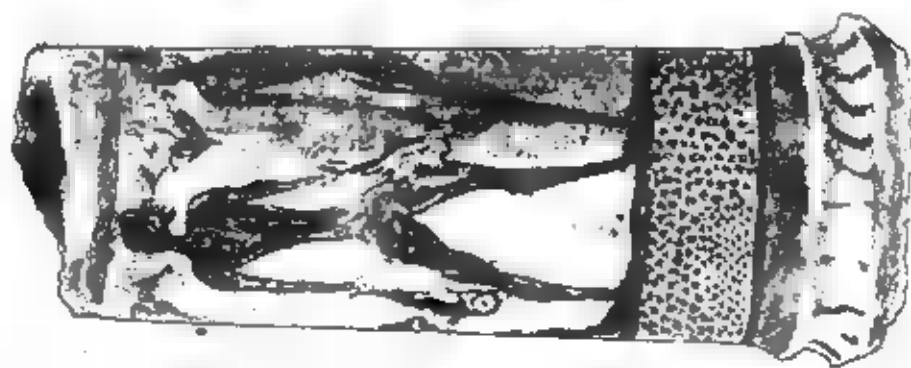
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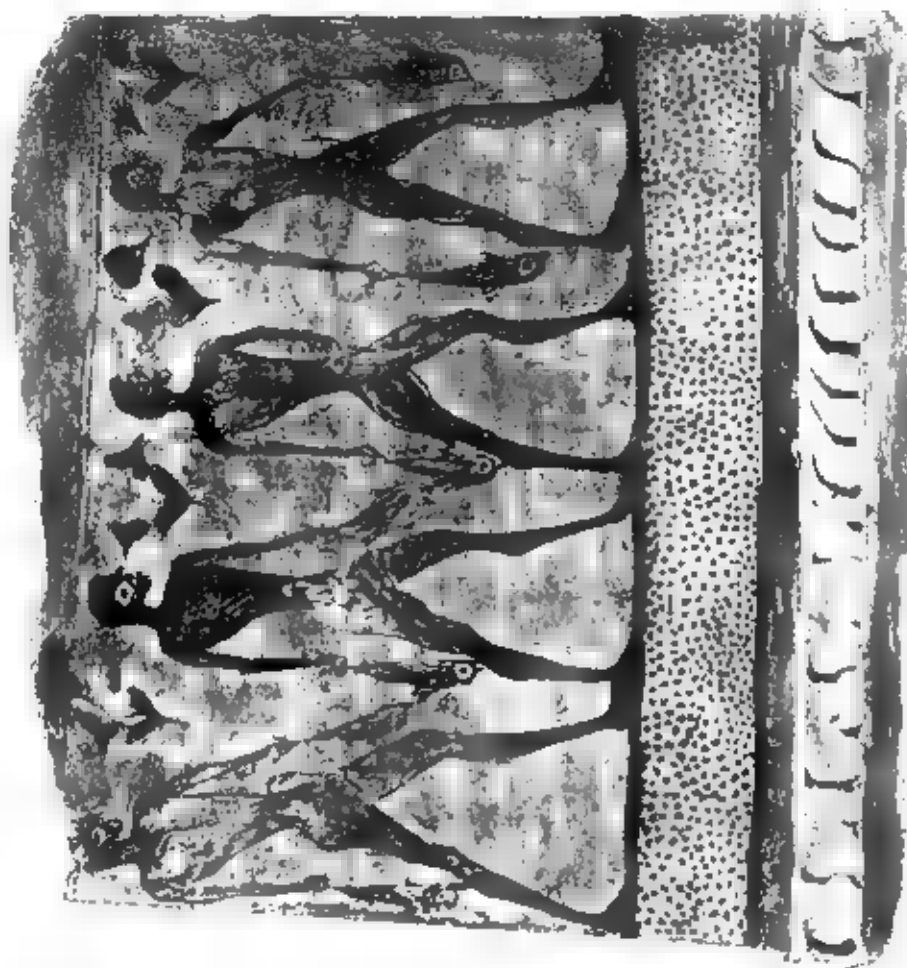




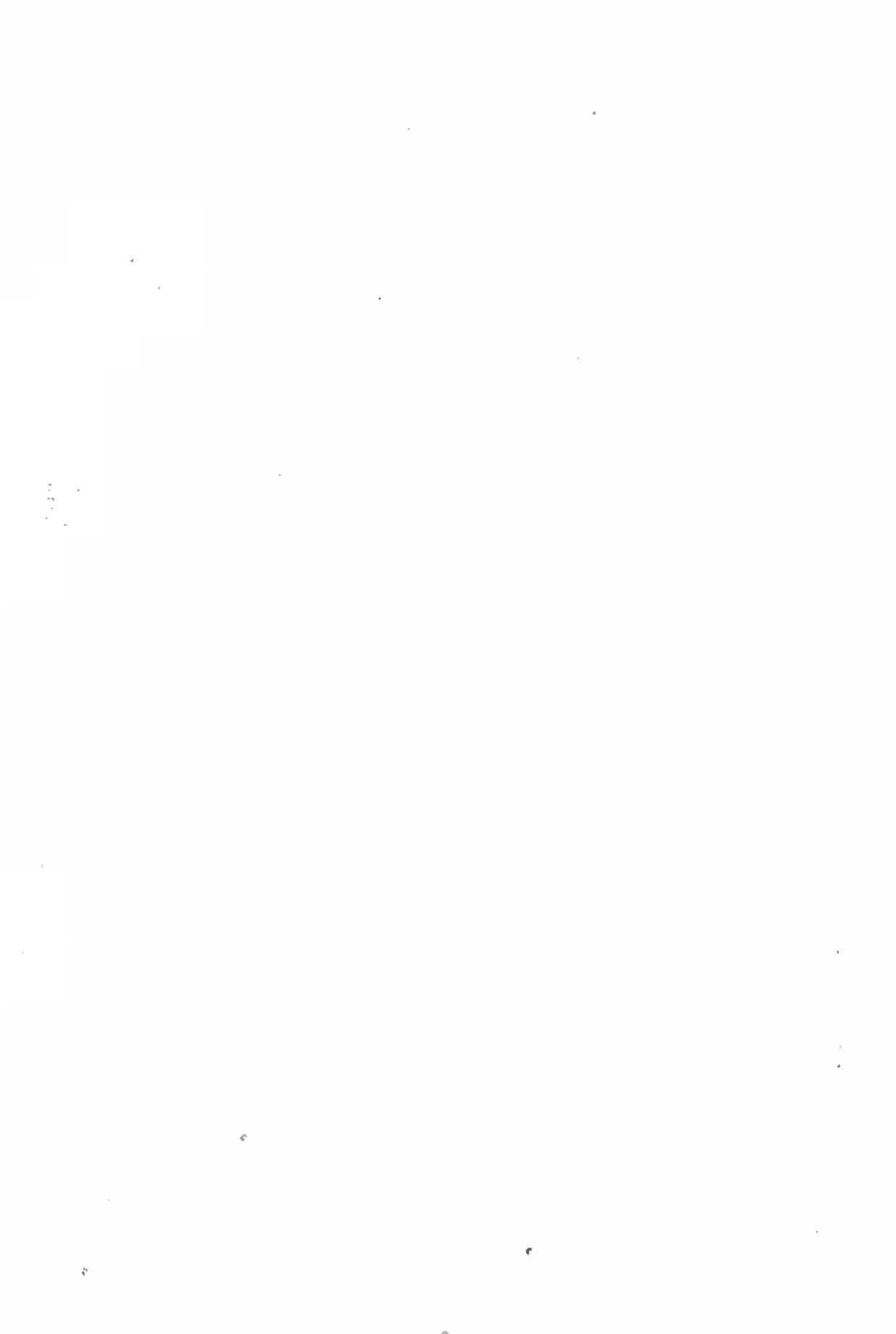


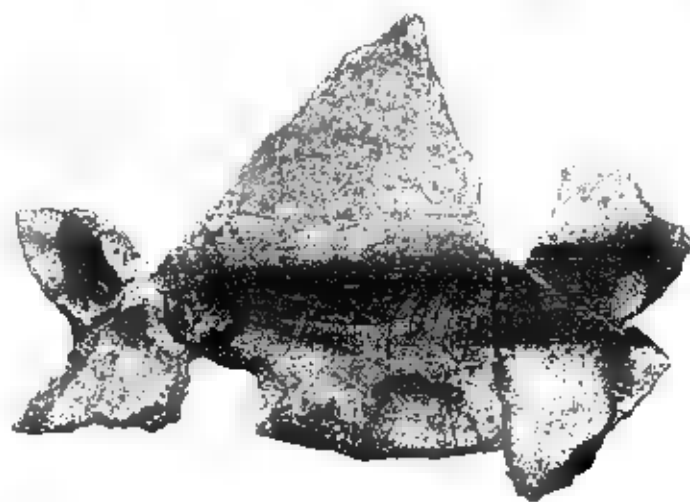
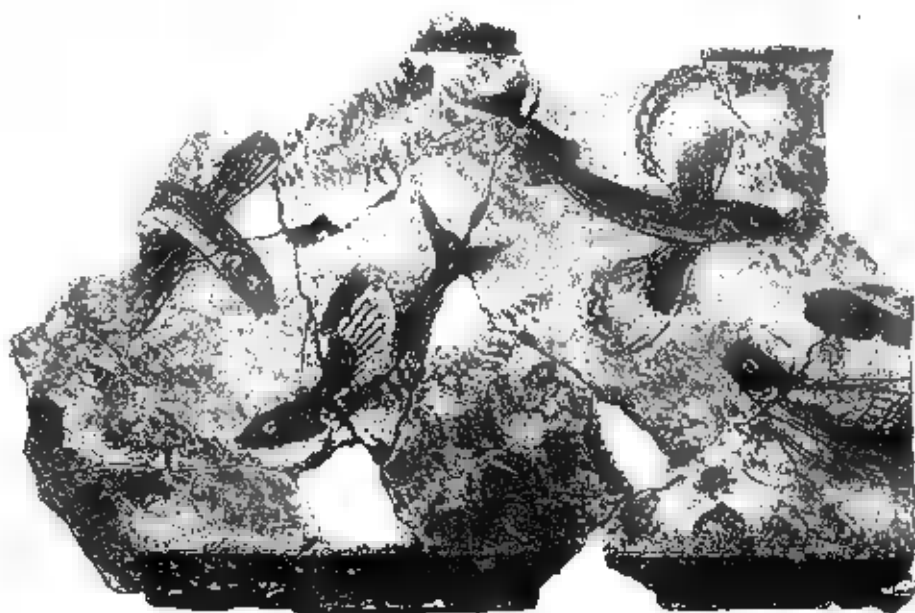


THE "FISHERMEN VASE," PHYLAKOL.  
Scale about  $\times 12$ .



THE "FISHERMEN VASE," PHYLAKOL.  
Scale about  $\times 12$ .





Fresco REPRESENTING FLYING FISH. PHYLAKOPI.

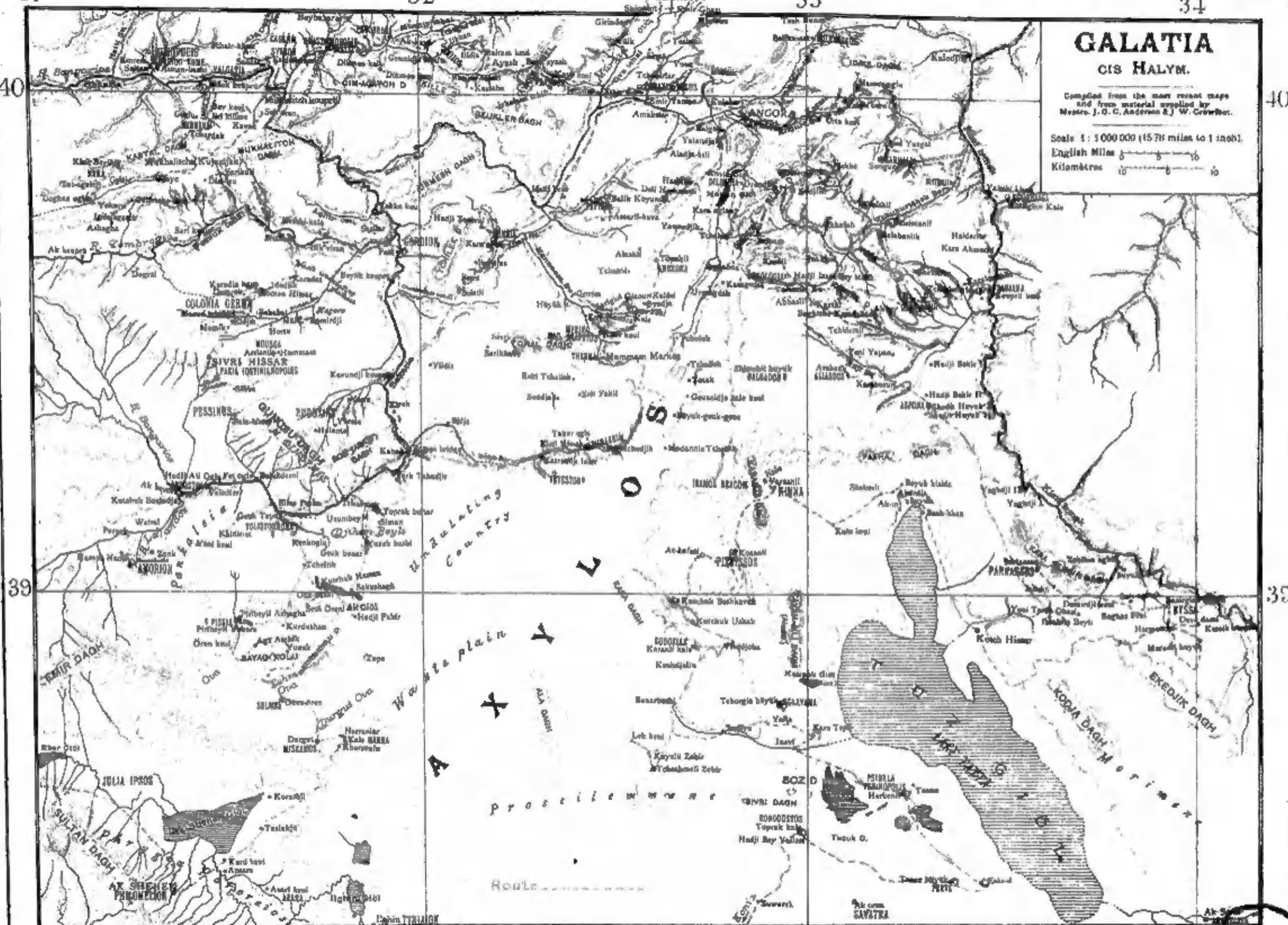
# GALATIA CIS HALYM.

Compiled from the most recent maps  
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Scale 1 : 500 000 (15.75 miles to 1 inch).

English Miles 0 5 10

Kilometres 0 5 10







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